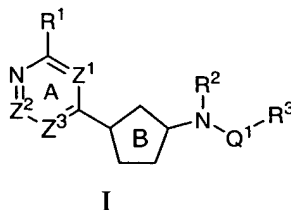


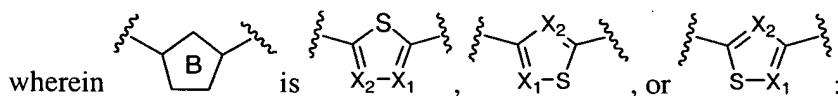
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AMENDMENTS TO THE CLAIMS

1. (Currently amended) A compound of formula I:



or a pharmaceutically acceptable salt thereof, wherein:



R^1 is halogen, CN, NO_2 , or V_mR ;

Z^1 and Z^3 are each independently CR^Z , and Z^2 is CR^1 ;

each occurrence of R^Z is independently halogen, CN, NO_2 , or $\text{U}_n\text{R}'$;

R^2 is $\text{U}_n\text{R}'$;

X^1 and X^2 are each independently CR^4 or N;

each occurrence of R^4 is independently halogen, CN, NO_2 , or V_mR ;

each occurrence of U or V is independently an optionally substituted C_{1-6} alkylidene chain, wherein up to two methylene units of the chain are optionally and independently replaced by $-\text{NR}-$, $-\text{S}-$, $-\text{O}-$, $-\text{CS}-$, $-\text{CO}_2-$, $-\text{OCO}-$, $-\text{CO}-$, $-\text{COCO}-$, $-\text{CONR}-$, $-\text{NRCO}-$, $-\text{NRCO}_2-$, $-\text{SO}_2\text{NR}-$, $-\text{NRSO}_2-$, $-\text{CONRNR}-$, $-\text{NRCONR}-$, $-\text{OCONR}-$, $-\text{NRNR}-$, $-\text{NRSO}_2\text{NR}-$, $-\text{SO}-$, $-\text{SO}_2-$, $-\text{P}(\text{O})-$, $-\text{P}(\text{O})_2-$, or $-\text{P}(\text{OR})-$;

m and n are each independently 0 or 1;

each occurrence of R is independently hydrogen or an optionally substituted C_{1-6} aliphatic group; and each occurrence of R' is independently hydrogen or an optionally substituted C_{1-6} aliphatic group, a 3-8-membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms

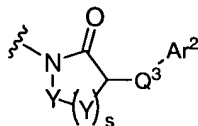
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independently selected from nitrogen, oxygen, or sulfur; or R and R', two occurrences of R, or two occurrences of R', are taken together with the atom(s) to which they are bound to form an optionally substituted 3-12 membered saturated, partially unsaturated, or fully unsaturated monocyclic or bicyclic ring having 0-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

Q¹ is -CO-, -SO₂-, [[-CONR-,]] or -SO₂NR-;

R³ is Q²-Ar¹,

or R² and Q¹-R³, taken together with the nitrogen atom, form the cyclic group:



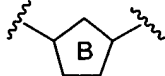
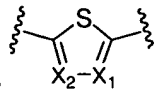
, where s is 1 or 2, each occurrence of Y is independently, as valency and stability permit, -CO-, -CS-, -SO₂-, -O-, -S-, -NR⁵-, or -C(R⁵)₂-, and R⁵ is U_nR';

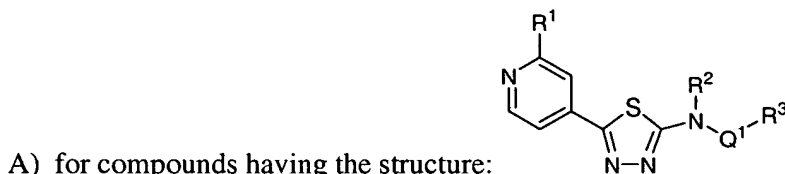
Q² and Q³ are each independently a bond or a C₁₋₆ alkylidene chain, wherein up to two methylene units of the chain are each optionally and independently replaced by [[-NR'-,]] -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR'-, -NR'CO-, -NR'CO₂-, -SO₂NR'-, -NR'SO₂-, -CONR'NR'-, -NR'CONR'-, -OCONR'-, -NR'NR'-, -NR'SO₂NR'-, -SO-, -SO₂-, -P(O)-, -P(O)₂-, or -P(OR')-; and wherein any carbon atom in the one or more methylene units is optionally substituted with one or two occurrences of R⁶, wherein each occurrence of R⁶ is independently halogen, CN, NO₂, or U_nR', or two occurrences of R⁶, or R' and R⁶, taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered cycloalkyl, heterocyclyl, aryl or heteroaryl ring; and

Ar¹ and Ar² are each independently a 5-8 membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein Ar¹ and Ar² are each optionally substituted with 0-5 independent occurrences of TR⁷; wherein T is a bond or is a C₁-C₆ alkylidene chain wherein up to two methylene units of T are

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optionally and independently replaced by $-\text{NR}-$, $-\text{S}-$, $-\text{O}-$, $-\text{CS}-$, $-\text{CO}_2-$, $-\text{OCO}-$, $-\text{CO}-$, $-\text{COCO}-$, $-\text{CONR}-$, $-\text{NRCO}-$, $-\text{NRCO}_2-$, $-\text{SO}_2\text{NR}-$, $-\text{NRSO}_2-$, $-\text{CONRNR}-$, $-\text{NRCONR}-$, $-\text{OCONR}-$, $-\text{NRNR}-$, $-\text{NRSO}_2\text{NR}-$, $-\text{SO}-$, $-\text{SO}_2-$, $-\text{P}(\text{O})-$, $-\text{P}(\text{O})_2-$, or $-\text{P}(\text{OR})-$; and each occurrence of R^7 is independently R' , halogen, NO_2 , or CN ;
provided that:

I for compounds described where  is , one or more of, or all of the following conditions apply:



A) for compounds having the structure:

- i) when R^1 is Cl , and R^2 is $-\text{CH}(\text{CH}_3)\text{COOCH}_3$ or hydrogen, then Q^1 - R^3 is not $-\text{CO}(\text{unsubstituted phenyl})$, $-\text{CO}(\text{unsubstituted 2-furyl})$, or $-\text{COCH}_2(\text{unsubstituted phenyl})$;
ii) when R^1 is hydrogen, R^2 is hydrogen, and Q^1 is $-\text{CO}-$, then R^3 is not:

- a) phenyl substituted with $4-\text{O}(\text{CH}_2)_{4-7}\text{CH}_3$ or $4-(\text{CH}_2)_{4-7}\text{CH}_3$; [;]
b) phenyl substituted with 2- Cl , 4- NO_2 , 4- Cl , 2- Br , 3- Br , 3- I , 3- CH_3 , 4- OCH_3 , 3- NO_2 , or 4- I ;
c) 2,6- OCH_3 -phenyl;
d) (5- Cl , 3- CH_3 , 1-phenyl)-pyrazol-4-yl; or
e) 4- OnBu -phenyl, $-\text{CH}_2\text{O}(2\text{-F-phenyl})$, $-(\text{CH}_2)_2\text{phenyl}$, furan-2-yl, thiophen-2-yl, 4- CH_3 -phenyl, $-\text{CH}_2\text{O}(2\text{-CH}_3\text{-phenyl})$, 3- OCH_3 -phenyl, 2-(2,5-dimethoxyphenyl)quinolin-4-yl, $-\text{NH}-(4\text{-Cl-phenyl})$, $-\text{NH}-(3,4\text{-dichlorophenyl})$, (2- CO_2H , 3- NO_2)-phenyl, 3,5-dimethyl-1,2,4-oxazol-4-yl, $-\text{CH}=\text{CH}$ -phenyl, 4- F -phenyl, $\text{C}(\text{CH}_3)_2\text{O}-(4\text{-Cl-phenyl})$, $-\text{NH}(3\text{-Cl-phenyl})$, -

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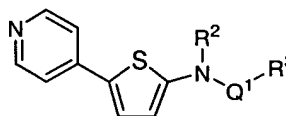
NHphenyl, unsubstituted phenyl, 3,4,5-OCH₃-phenyl, 4-NO₂-phenyl, 4-cyclopentoxo-phenyl, -(CH₂)₃phenyl, - (tricyclo[3.3.1.1^{3,7}]decan-1-yl, -CH₂O-(3-CH₃-phenyl), 3-NO₂-phenyl, -cyclopropyl-(4-tert-butyl-phenyl), 2,3-OCH₃-phenyl, 1,3-benzodioxo-5-yl, -CH₂-O-(4-F-phenyl), or 3-Br-phenyl;

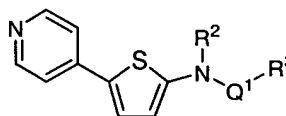
iii) when R¹ is hydrogen, R² is hydrogen, and Q¹ is -CSNH-, then R³ is not 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl;

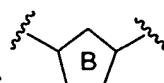
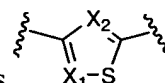
iv) when R¹ is hydrogen, R² is hydrogen, and Q¹ is SO₂, then R³ is not unsubstituted phenyl, unsubstituted benzyl, unsubstituted naphthyl, phenyl substituted with para-NHCOCH₃, para-NH₂, or para-CH₃ ; and

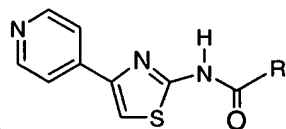
v) when R¹ is hydrogen, R² is -CH₂CH=CH₂, and Q¹ is CO, then R³ is not 4-OCH₃-phenyl, unsubstituted naphthyl, -NH-(4-OCH₃-phenyl), 3,5-OCH₃-phenyl, -CH₂Ophenyl, -CH₂-thiophen-2-yl, or -CH(phenyl)(CH₂CH₃); and

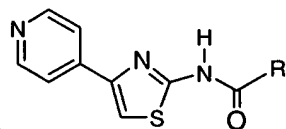
vi) when R¹ is hydrogen, R² is CH₂CH₃, and Q¹ is CO, then R³ is not 2,4-Cl-phenyl; and



B) for compounds having the structure: , when R² is hydrogen or CH₃, and Q¹ is -CO-, then R³ is not -OCH₂CH₂OCH₂phenyl;

II for compounds described where  is , one or more of, or all of the following conditions apply:



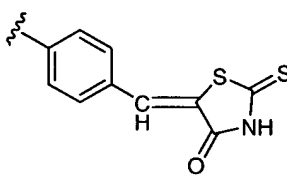
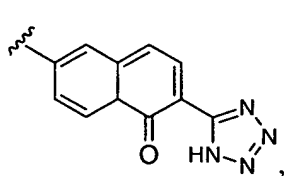
A) for compounds having the structure: ,

i) when R³ is Q²-Ar¹, and Q² is a bond then Ar¹ is not any one or more of the following: unsubstituted phenyl or phenyl substituted with 2-Br; 2-Cl; 2-I; 2,6-F; 3,5-OCH₃; 3,4,5-OCH₃; 2,4-OCH₃; 3,4-CH₃; 2,5-Cl; 3,4,-OCH₃; 2-

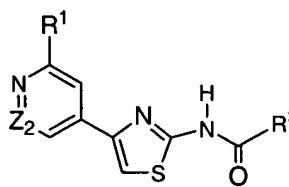
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Cl, 5-NO₂; 3,5-Cl; 3-O(CH₂)₄CH₃, 3-O-n-butyl, 3-CF₃, 3-OCH₃, 3-Br; 3-NO₂; 3-CH₃; 3-O-phenyl; 3-Cl; 4-N(CH₃)₂; 4-N(CH₂CH₃)₂; 4-SO₂N(R')₂; 4-CN; 4-COOCH₃; 4-C(O)phenyl; 4-phenyl; 4-tert-butyl, 4-O-phenyl; 4-O-isopropyl; 4-OCH₃; 4-OCH₂CH₃; 4-O-n-butyl; 4-Cl; 4-Br; 4-F; 4-CH₃; 4-NO₂; 4-Cl; 3-NO₂, 4-morpholino; 3-NO₂, 2,5-dioxopyrrolidinyl, or 4-piperidinyl; and

ii) R³ is not any one or more of the following groups:



, -CH=CH(thiophen-2-yl), -CH=CH-unsubstituted phenyl, -CH₂(3-NHCOPh-phenyl), -6-bromo-2-(4-ethylphenyl)-4-quinolinyl, -CH₂-pyrrolidine, unsubstituted cyclohexyl, unsubstituted benzyl, unsubstituted furan-2-yl, -CH=CH(3-NO₂-phenyl), -CH=CH(4-NO₂-phenyl), -CH₂-naphthyl, unsubstituted naphthyl, unsubstituted thiophene, unsubstituted cyclopropyl, 1,4-benzodioxin, 2-oxo-1-benzopyran, 4-oxo-1-benzopyran, 2-thienyl-quinolin-4-yl, 3-chloro-benzo[b]thiophen-2-yl, 5-Br-(thiophen-2-yl), 5-Cl-(thiophen-2-yl), 5-NO₂-(thiophen-2-yl), 5-NO₂-(furan-2-yl), 2,5-Cl-(thiophen-3-yl), -CH=CH-(5-NO₂-thiophen-2-yl), 5-NO₂-(benzothiophen-2-yl), 3-OCH₃-(naphth-2-yl), -CH₂O(2,4-Cl-phenyl), -(CH₂)₂S-phenyl, 2-phenyl-quinolin-4-yl, -CH₂O(4-Cl-phenyl), -CH₂CH₂-3-(4-Cl-phenyl)-1-phenyl-1-H-pyrazol-4-yl, or -CH₂(1,3-dioxoisindole); and



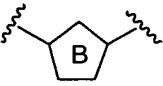
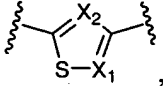
B) for compounds having the structure:

i) when R¹ is Cl, and X₁ is C-Cl, then R³ is not NHSO₂-(2-CF₃-phenyl) or -NHSO₂-(2,6-dimethoxy-phenyl);

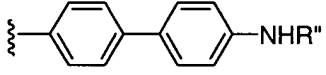
ii) when R¹ is CH₃, and X₁ is C-CH₃, then R³ is not an optionally substituted indole or optionally substituted dihydroindole; and

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C) for compounds of general formula I, when Z_1 , Z_2 and Z_3 are each CH, R^1 is H, X^1 is CH and X_2 is C-COOCH₃, then R^3 is not 2-(4-ethyl-phenyl)-6-bromo-quinolin-4-yl; and

III for compounds described above where  is , one or more of, or all of the following conditions apply:

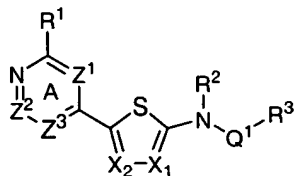
A) when Z^1 , Z^2 and Z^3 are each CH, X^2 is N, X^1 is CH, Q^1 is -CONR-, and R^2 is hydrogen or -CH₃, then R^3 is not optionally substituted pyridyl, optionally substituted thiazol-4-yl, -CH₂pyridyl, benzimidazol-4-yl, quinolin-2-yl, 1-bromo-isoquinolin-3-yl, benzthiazol-2-yl, optionally substituted 5,6,7,8-tetrahydronaphthyridin-2-yl, or phenyl substituted with -CH₂piperidiny; and

B) when Z^1 , Z^2 and Z^3 are each CH, X^2 is N, X^1 is CH, Q^1 is SO₂, and R^2 is hydrogen, then R^3 is not phenyl substituted with  where R'' is hydrogen or -COCH₃;

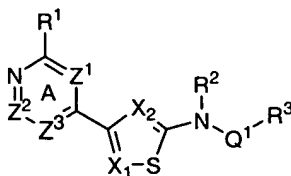
C) when Z^1 , Z^2 and Z^3 are each CH, X_1 is C-CO₂H, X^2 is CH, R^2 is hydrogen, and Q^1 is SO₂, then R^3 is not 2-CH₃-phenyl; and

D) when Z^1 , Z^2 and Z^3 are each CH, X_1 is CH, X^2 is N, R^2 is hydrogen, and Q^1 is CO, then R^3 is not 5-methoxy-6-trifluoromethyl-1H-indole.

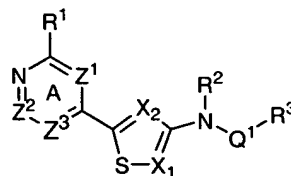
2. (Original) The compound of claim 1, wherein the compound has one of the structures:



I-A



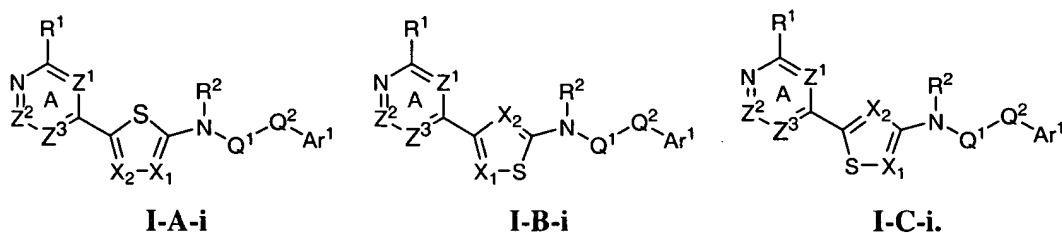
I-B



or I-C.

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3. (Original) The compound of claim 1, wherein R^3 is Q^2-Ar^1 and compounds have one of formulas **I-A-i**, **I-B-i**, or **I-C-i**:



4. (Original) The compound of claim 3, wherein R^2 is hydrogen, or is U_nR' , where n is 1, and U is a C_{1-6} alkylidene chain wherein one or two methylene units are optionally and independently replaced by O, NR, S, or C(O).

5. (Original) The compound of claim 3, wherein U is $-CH_2-$, $-CH_2CH_2-$, $-CH_2CH_2CH_2-$, $-CH_2CH_2CH_2CH_2-$, $-CH_2O-$, $-CH_2S-$, $-CH_2NR-$, $-CH_2CH_2O-$, $-CH_2CH_2S-$, $-CH_2CH_2NR-$, $-CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2NR-$, $-CH_2CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2CH_2NR-$, $-CH_2CH_2OCH_2CH_2-$, $-(CH_2)_4NHCH_2-$, $-(CH_2)_3NHCH_2CH_2-$, or $-CH_2CH_2NHCH_2CH_2-$, and preferred R' groups are hydrogen, C_1 - C_4 alkyl, optionally substituted tetrahydropyranyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, pyridinyl, phenyl, or cyclohexyl, or R and R' , taken together with the nitrogen atom to which they are bound, form an optionally substituted 5- or 6-membered heterocyclyl ring.

6. (Original) The compound of claim 3, wherein Q^1 is $-C(O)-$ or $-SO_2NR-$.

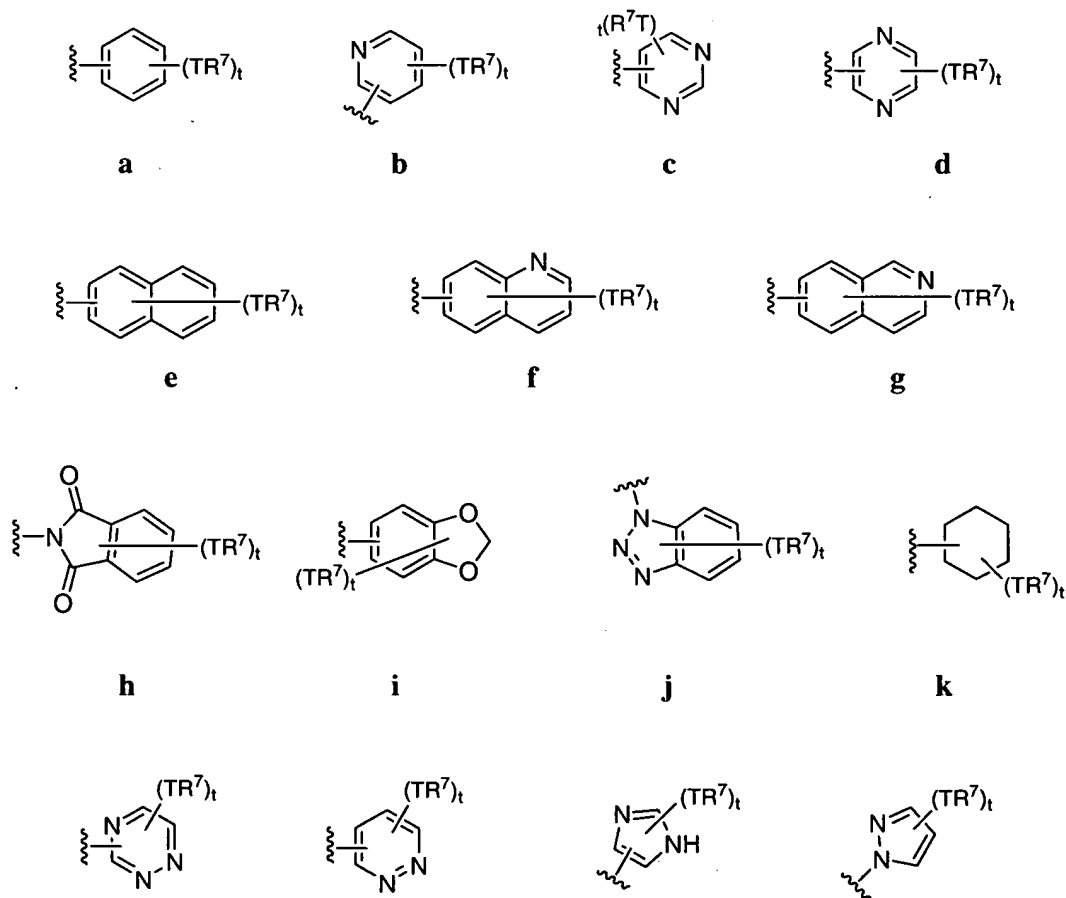
7. (Original) The compound of claim 3, wherein Q^2 is a direct bond, or is $-(CHR^6)_q-$, $-(CHR^6)_qO-$, $-(CHR^6)_qS-$, $-(CHR^6)_qS(O)_2-$, $-(CHR^6)_qS(O)-$, $-(CHR^6)_qNR-$, or $-(CHR^6)_qC(O)-$, wherein q is 0, 1, 2, or 3, and R^6 is R' , $-N(R)(R')$,

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$-(\text{CH}_2)_{1-4}\text{N}(\text{R})(\text{R}')$, $-\text{OR}'$, $-(\text{CH}_2)_{1-4}\text{OR}'$, $-\text{NR}(\text{CH}_2)_{1-4}\text{N}(\text{R})(\text{R}')$, $-\text{NR}(\text{CH}_2)_{1-4}\text{SO}_2\text{R}'$, $-\text{NR}(\text{CH}_2)_{1-4}\text{COOR}'$, or $-\text{NR}(\text{CH}_2)_{1-4}\text{COR}'$, or two occurrences of R^6 , taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered saturated, partially unsaturated, or fully unsaturated ring.

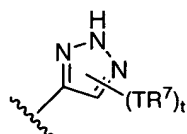
8. (Original) The compound of claim 7, wherein R^6 is CH_2OH , $\text{CH}_2\text{CH}_2\text{OH}$, OH , OMe , OEt , NH_2 , $\text{NH}(\text{Me})$, $\text{NH}(\text{Et})$, $\text{N}(\text{Me})(\text{Me})$, CH_2NH_2 , $\text{CH}_2\text{CH}_2\text{NH}_2$, $\text{NHCO}_2t\text{-butyl}$, phenyl, cyclopentyl, methyl, ethyl, isopropyl, cyclopropyl, $\text{NH}(\text{CH}_2)_3\text{NH}_2$, $\text{NH}(\text{CH}_2)_2\text{NH}_2$, $\text{NH}(\text{CH}_2)_2\text{NHEt}$, $\text{NHCH}_2\text{pyridyl}$, $\text{NHSO}_2\text{phenyl}$, $\text{NHC}(\text{O})\text{CH}_2\text{C}(\text{O})\text{O}t\text{-butyl}$, $\text{NHC}(\text{O})\text{CH}_2\text{NH}_3$, and $\text{NHCH}_2\text{-imidazol-4-yl}$.

9. (Original) The compound of claim 3, wherein Ar^1 is:



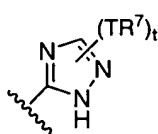
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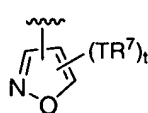
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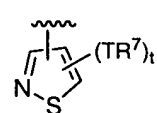
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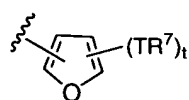
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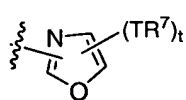


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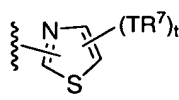
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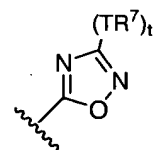
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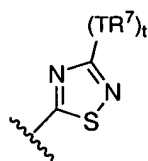
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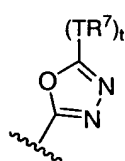
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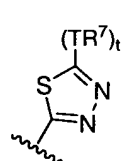
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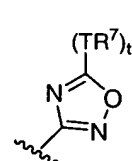
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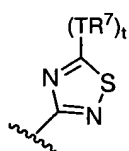
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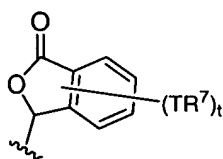
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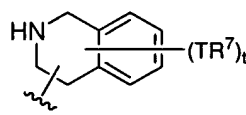
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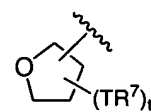
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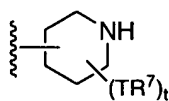
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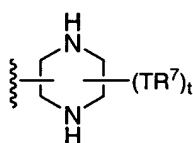
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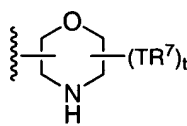
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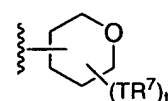
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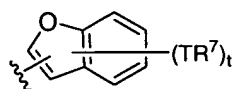
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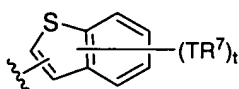
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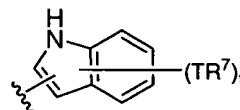
Applicants: Jingrong Cao et al.
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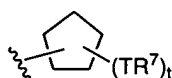
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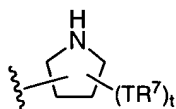
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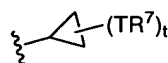
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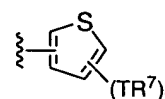
mm



nn



oo



pp

wherein t is 0, 1, 2, 3, 4 or 5, and wherein any Ar^1 is bonded to Q^2 through any substitutable nitrogen or carbon atom, and wherein one or more hydrogen atoms on any substitutable nitrogen or carbon atom is substituted with one or more independent occurrences of TR^7 .

10. (Original) The compound of claim 9, wherein Ar^1 is **a**, **b**, **e**, **g**, **h**, **i**, **j**, **k**, **r**, **cc**, **dd**, **ff**, **jj**, **ll**, or **pp**.

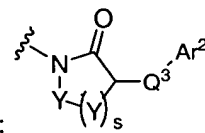
11. (Original) The compound of claim 9, wherein T is a bond or is an optionally substituted C_{1-6} alkylidene chain wherein one or two methylene units are optionally and independently replaced by $-\text{O}-$, $-\text{NR}-$, $-\text{S}-$, $-\text{SO}_2-$, $-\text{COO}-$, $-\text{CO}-$, $-\text{OSO}_2-$, $-\text{NRSO}_2$, $-\text{CONR}-$, or $-\text{SO}_2\text{NR}-$, and R^7 is R' or halogen.

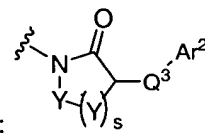
12. (Original) The compound of claim 9, wherein each occurrence of TR^7 is independently $-\text{C}_{1-3}\text{alkyl}$, $-\text{OR}'$, $-\text{SR}'$, $-\text{CF}_3$, $-\text{OCF}_3$, $-\text{SCF}_3$, $-\text{F}$, $-\text{Cl}$, I , $-\text{Br}$, $-\text{COOR}'$, $-\text{COR}'$, $-\text{O}(\text{CH}_2)_4\text{N}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_3\text{N}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_2\text{N}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)\text{N}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_4\text{CON}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_3\text{CON}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_2\text{CON}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)\text{CON}(\text{R})(\text{R}')$, $-\text{C}(\text{O})\text{N}(\text{R})(\text{R}')$, $-(\text{CH}_2)_4\text{OR}'$, $-(\text{CH}_2)_3\text{OR}'$, $-(\text{CH}_2)_2\text{OR}'$,

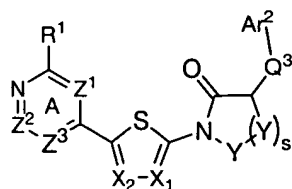
Applicants: Jingrong Cao et al.
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-CH₂OR', optionally substituted phenyl or benzyl, -N(R)(R'), -(CH₂)₄N(R)(R'), -(CH₂)₃N(R)(R'), -(CH₂)₂N(R)(R'), -(CH₂)N(R)(R'), or SO₂N(R)(R'), NRSO₂R', CON(R)(R'), or -OSO₂R'.

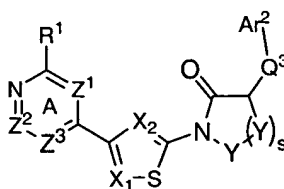
13. (Original) The compound of claim 1, wherein R³ is Q²-Ar¹, or R² and Q¹-R³,



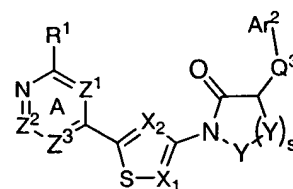
taken together with the nitrogen atom, form the cyclic group: , where s is 1 or 2, each occurrence of Y is independently, as valency and stability permit, -CO-, -CS-, -SO₂-, -O-, -S-, -NR⁵-, or -C(R⁵)₂-, and R⁵ is U_nR', and compounds of formula I-A-ii, I-B-ii, and I-C-ii are provided:



I-A-ii



I-B-ii



I-C-ii.

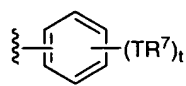
14. (Original) The compound of claim 13, wherein Q³ is a direct bond, or is -(CHR⁶)_q-, -(CHR⁶)_qO-, -(CHR⁶)_qS-, -(CHR⁶)_qS(O)₂-, -(CHR⁶)_qS(O)-, -(CHR⁶)_qNR-, or -(CHR⁶)_qC(O)-, wherein q is 0, 1, 2, or 3, and R⁶ is R', -N(R)(R'), -(CH₂)₁₋₄N(R)(R'), -OR', -(CH₂)₁₋₄OR', -NR(CH₂)₁₋₄N(R)(R'), -NR(CH₂)₁₋₄SO₂R', -NR(CH₂)₁₋₄COOR', or -NR(CH₂)₁₋₄COR', or two occurrences of R⁶, taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered saturated, partially unsaturated, or fully unsaturated ring.

15. (Original) The compound of claim 14, wherein R⁶ is CH₂OH, CH₂CH₂OH, OH, OMe, OEt, NH₂, NH(Me), NH(Et), N(Me)(Me), CH₂NH₂, CH₂CH₂NH₂, NHCO₂*t*-butyl, phenyl, cyclopentyl, methyl, ethyl, isopropyl, cyclopropyl,

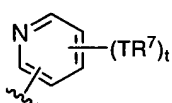
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NH(CH₂)₃NH₂, NH(CH₂)₂NH₂, NH(CH₂)₂NHEt, NHCH₂pyridyl, NHSO₂phenyl,
 NHC(O)CH₂C(O)O*t*-butyl, NHC(O)CH₂NH₃, and NHCH₂-imidazol-4-yl.

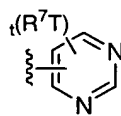
16. (Original) The compound of claim 13, wherein Ar² is:



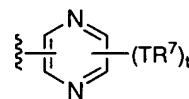
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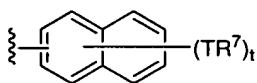
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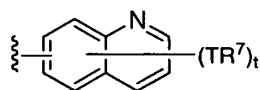
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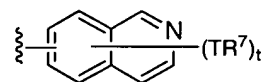
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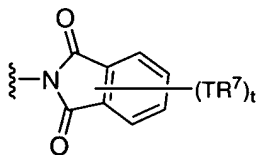
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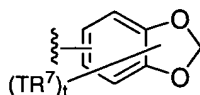
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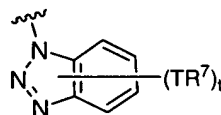
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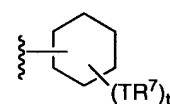
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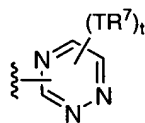
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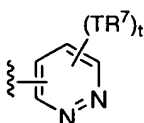
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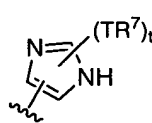
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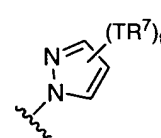
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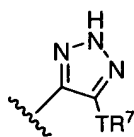
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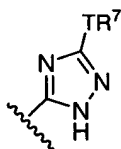
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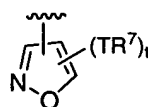
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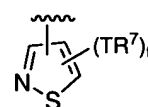
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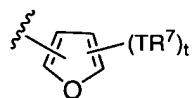


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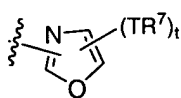


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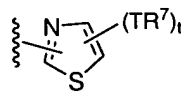
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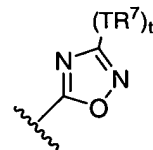
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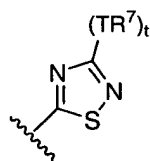
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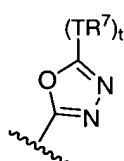
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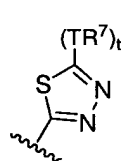
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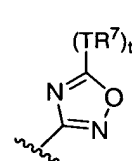
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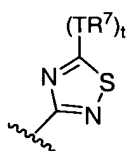
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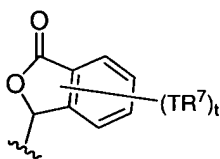
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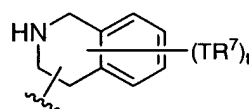
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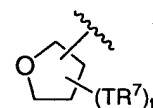
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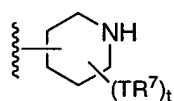
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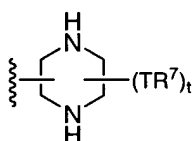
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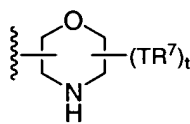
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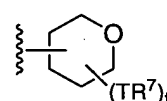
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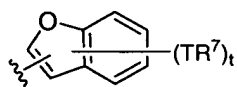
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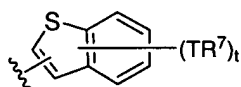
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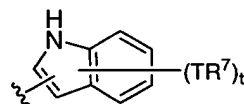
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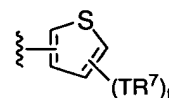
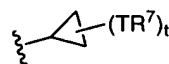
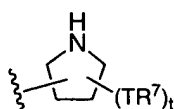
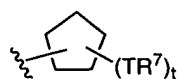
jj



kk



ll



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mm

nn

oo

pp

wherein t is 0, 1, 2, 3, 4 or 5, and wherein any Ar^2 is bonded to Q^3 through any substitutable nitrogen or carbon atom, and wherein one or more hydrogen atoms on any substitutable nitrogen or carbon atom is substituted with one or more independent occurrences of TR^7 .

17. (Original) The compound of claim 16, wherein Ar^2 is **a, b, e, g, h, i, j, k, n, r, cc, dd, ff, jj, ll, or pp**.

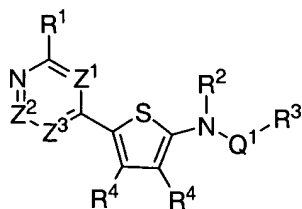
18. (Original) The compound of claim 16, wherein T is a bond or is an optionally substituted C_{1-6} alkylidene chain wherein one or two methylene units are optionally and independently replaced by $-O-$, $-NR-$, $-S-$, $-SO_2-$, $-COO-$, $-CO-$, $-OSO_2-$, $-NRSO_2$, $-CONR-$, or $-SO_2NR-$, and R^7 is R' or halogen.

19. (Original) The compound of claim 16, wherein each occurrence of TR^7 is independently $-C_{1-3}alkyl$, $-OR'$, $-SR'$, $-CF_3$, $-OCF_3$, $-SCF_3$, $-F$, $-Cl$, I , $-Br$, $-COOR'$, $-COR'$, $-O(CH_2)_4N(R)(R')$, $-O(CH_2)_3N(R)(R')$, $-O(CH_2)_2N(R)(R')$, $-O(CH_2)N(R)(R')$, $-O(CH_2)_4CON(R)(R')$, $-O(CH_2)_3CON(R)(R')$, $-O(CH_2)_2CON(R)(R')$, $-O(CH_2)CON(R)(R')$, $-C(O)N(R)(R')$, $-(CH_2)_4OR'$, $-(CH_2)_3OR'$, $-(CH_2)_2OR'$, $-CH_2OR'$, optionally substituted phenyl or benzyl, $-N(R)(R')$, $-(CH_2)_4N(R)(R')$, $-(CH_2)_3N(R)(R')$, $-(CH_2)_2N(R)(R')$, $-(CH_2)N(R)(R')$, or $SO_2N(R)(R')$, $NRSO_2R'$, $CON(R)(R')$, or $-OSO_2R'$.

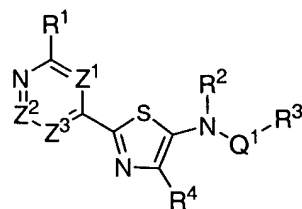
20. (Original) The compound of claim 13, wherein R^5 is hydrogen, $(CH_2)_3OR'$, $(CH_2)_2OR'$, $(CH_2)OR'$, $(CH_2)_3N(R')_2$, $(CH_2)_2N(R')_2$, $(CH_2)N(R')_2$, or $C_{1-4}aliphatic$.

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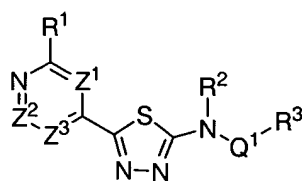
21. (Original) The compound of claim 1, wherein X^1 and X^2 are each independently CR^4 or N, and compounds have one of formulas **II**, **III**, **IV**, **V**, **VI**, **VII**, **VIII**, **IX**, **X**, **XI**, **XII**, or **XIII**:



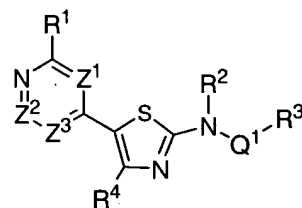
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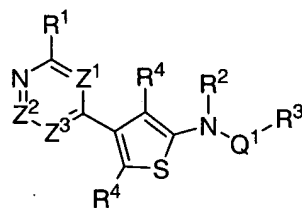
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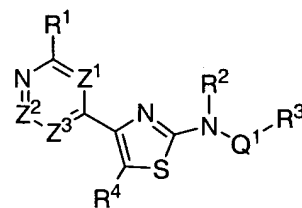
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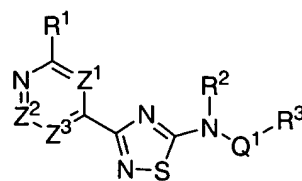
V



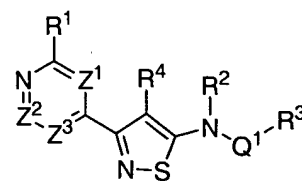
VI



VII

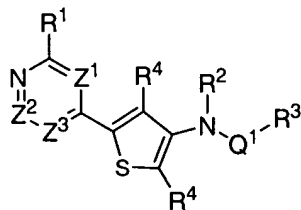


VIII

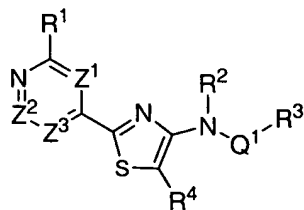


IX

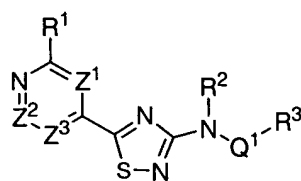
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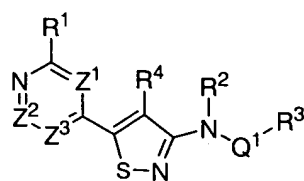
X



XI

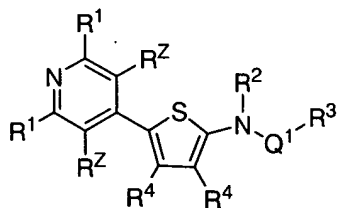


XII

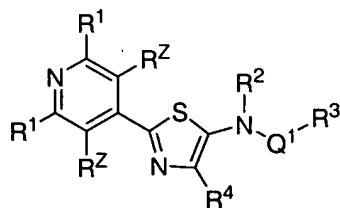


XIII

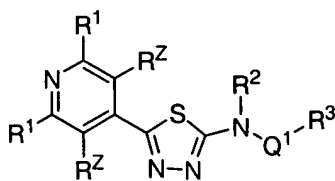
22. (Previously amended) The compound of claim 21, wherein compounds have one of formulas **II-A**, **III-A**, **IV-A**, **V-A**, **VI-A**, **VII-A**, **VIII-A**, **IX-A**, **X-A**, **XI-A**, **XII-A**, or **XIII**:



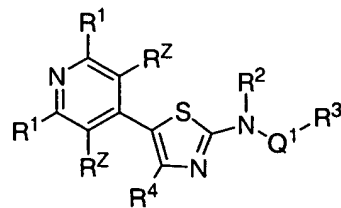
II-A



III-A

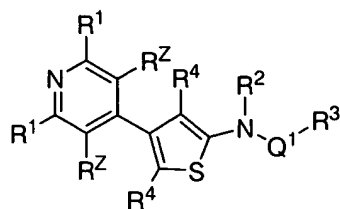


IV-A

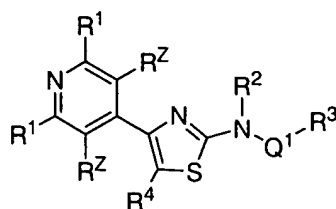


V-A

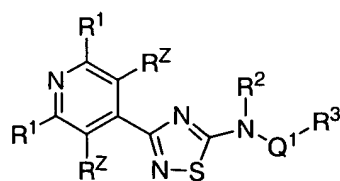
Applicants: Jingrong Cao et al.
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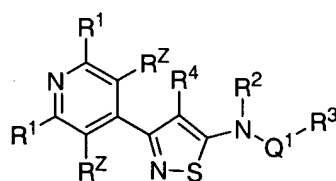
VI-A



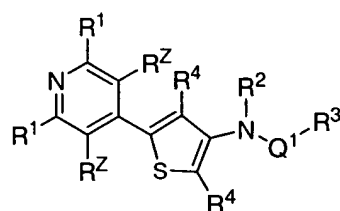
VII-A



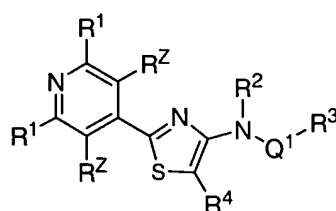
VIII-A



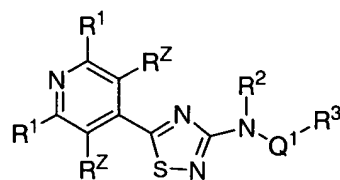
IX-A



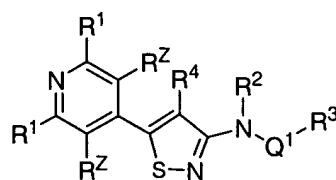
X-A



XI-A



XII-A



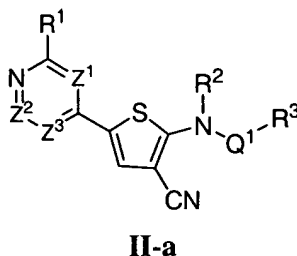
XIII-A

23. (Original) The compound of claim 1, wherein each occurrence of R^1 is independently hydrogen, halogen, optionally substituted C_1 - C_4 aliphatic, OR, SR, or $N(R)_2$.

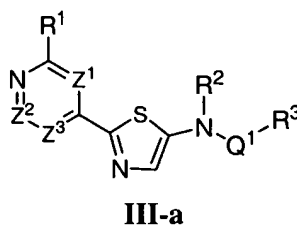
24. (Original) The compound of claim 23, wherein each occurrence of R^1 is independently hydrogen, halogen, $-CH_3$, $-CH_2CH_3$, $-OH$, $-OCH_3$, $-SCH_3$, $-NH_2$, $-N(CH_3)_2$, $-N(CH_2CH_3)_2$, $NH(CH_2)_2NHCH_3$, $NH(cyclopropyl)$, $NH(CH_2)cyclopropyl$, or $NH(CH_2)_2N(CH_3)_2$.

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25. (Original) The compound of claim 1, wherein each occurrence of R^Z is independently hydrogen, halogen, C_1 - C_4 aliphatic, OH, OR', or N(R)(R').
26. (Original) The compound of claim 25, wherein each occurrence of R^Z is independently hydrogen, halogen, Me, OH, OMe, NH_2 , or N(Me)₂.
27. (Original) The compound of claim 1, wherein R^4 groups are each independently hydrogen, C_{1-6} aliphatic, CN, COR, C(=O)OR, C(=O)N(R)₂, or halogen.
28. (Original) The compound of claim 1, wherein one occurrence of R^4 is CN and compounds have the general structure **II-a**:

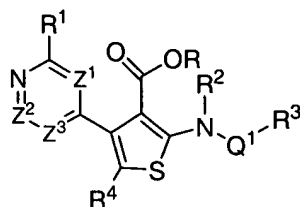


29. (Original) The compound of claim 1, wherein R^4 is hydrogen and compounds have the general structure **III-a**:



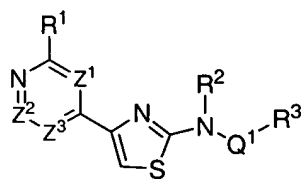
30. (Original) The compound of claim 1, wherein one occurrence of R^4 is hydrogen and the other occurrence of R^4 is -COOR and compounds have the general structure **VI-a**:

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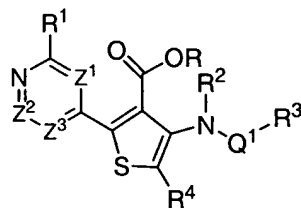
VI-a

31. (Original) The compound of claim 1, wherein R^4 is hydrogen and compounds have the general structure **VII-a**:



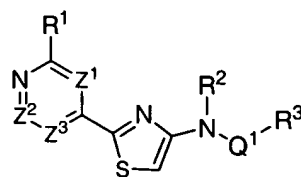
VII-a

32. (Original) The compound of claim 1, wherein one occurrence of R^4 is hydrogen and the other occurrence of R^4 is $C(=O)OR$ and compounds have the general structure **X-a**:



X-a

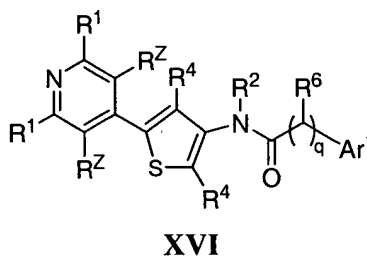
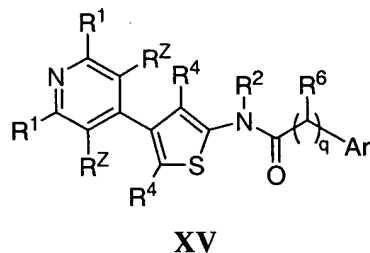
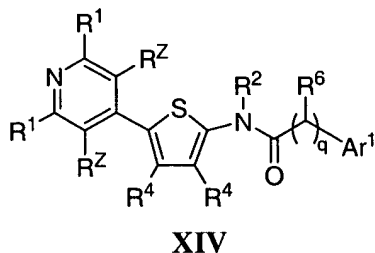
33. (Original) The compound of claim 1, wherein R^4 is hydrogen and compounds have the general structure **XI-a**:



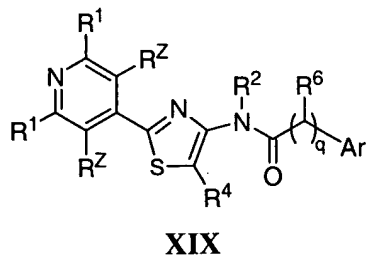
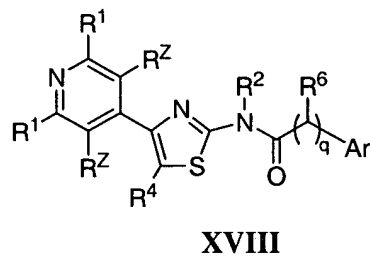
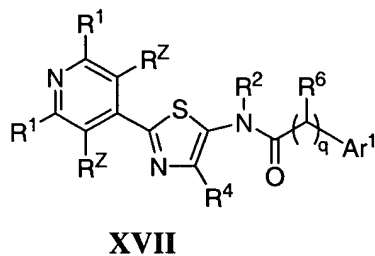
XI-a

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34. (Original) The compound of claim 1, wherein Q^1 is $-CO-$, Q^2 is CHR^6 , q is 1, 2, or 3, and compounds have one of formulas **XIV**, **XV**, or **XVI**:



35. (Original) The compound of claim 1, wherein Q^1 is $-CO-$, Q^2 is CHR^6 , q is 1, 2 or 3, and compounds have one of formulas **XVII**, **XVIII**, or **XIX**:



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36. (Original) The compound of claims 34 or 35, wherein compound variables are selected from one of more of the following groups:

- a) each occurrence of R^1 is independently hydrogen, halogen, optionally substituted C_1 - C_4 aliphatic, OR, SR, or $N(R)_2$;
- b) each occurrence of R^1 is independently hydrogen, halogen, $-CH_3$, $-CH_2CH_3$, $-OH$, $-OCH_3$, $-SCH_3$, $-NH_2$, $-N(CH_3)_2$, $-N(CH_2CH_3)_2$, $NH(CH_2)_2NHCH_3$, $NH(cyclopropyl)$, $NH(CH_2)cyclopropyl$, or $NH(CH_2)_2N(CH_3)_2$;
- c) each occurrence of R^Z is independently hydrogen, halogen, optionally substituted C_1 - C_4 aliphatic, OH, $O(R')$, or $N(R)(R')$;
- d) each occurrence of R^Z is independently hydrogen, halogen, Me, OH, OMe, NH_2 , or $N(Me)_2$;
- e) R^2 is hydrogen, or is U_nR' , where n is 1, and U is $-CH_2-$, $-CH_2CH_2-$, $-CH_2CH_2CH_2-$, $-CH_2CH_2CH_2CH_2-$, $-CH_2O-$, $-CH_2S-$, $-CH_2NR-$, $-CH_2CH_2O-$, $-CH_2CH_2S-$, $-CH_2CH_2NR-$, $-CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2NR-$, $-CH_2CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2CH_2NR-$, $-CH_2CH_2OCH_2CH_2-$, $-(CH_2)_4NHCH_2-$, $-(CH_2)_3NHCH_2CH_2-$, or $-CH_2CH_2NHCH_2CH_2-$, and R' groups are hydrogen, C_1 - C_4 alkyl, optionally substituted tetrahydropyranyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, pyridinyl, phenyl, or cyclohexyl, or R and R' , taken together with the nitrogen atom to which they are bound, form an optionally substituted 5- or 6-membered heterocycl ring;
- f) each occurrence of R^4 is independently hydrogen, C_1 - C_6 aliphatic, CN, COR, COOR, $CON(R)_2$, or halogen;
- g) q is 1, 2, or 3;
- h) R^6 is R' , $-N(R)(R')$, $-(CH_2)_{1-4}N(R)(R')$, $-OR'$, $-(CH_2)_{1-4}OR'$, $-NR(CH_2)_{1-4}N(R)(R')$, $-NR(CH_2)_{1-4}SO_2R'$, $-NR(CH_2)_{1-4}COOR'$, or $-NR(CH_2)_{1-4}COR'$, or two occurrences of R^6 , taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered saturated, partially unsaturated, or fully unsaturated ring;

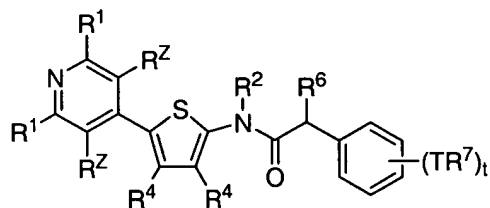
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i) R^6 is CH_2OH , CH_2CH_2OH , OH , OMe , OEt , NH_2 , $NH(Me)$, $NH(Et)$, $N(Me)(Me)$, CH_2NH_2 , $CH_2CH_2NH_2$, $NHCO_2t$ -butyl, phenyl, cyclopentyl, methyl, ethyl, isopropyl, cyclopropyl, $NH(CH_2)_3NH_2$, $NH(CH_2)_2NH_2$, $NH(CH_2)_2NH(Et)$, $NHCH_2$ pyridyl, $NHSO_2$ phenyl, $NHC(O)CH_2C(O)Ot$ -butyl, $NHC(O)CH_2NH_3$, and $NHCH_2$ -imidazol-4-yl;

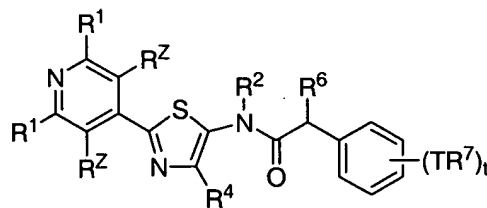
j) Ar^1 is ring **a**, **b**, **e**, **g**, **h**, **i**, **j**, **k**, **r**, **cc**, **dd**, **ff**, **jj**, **ll**, or **pp**, wherein t is 0, 1, 2, or 3, and T is a bond or is an optionally substituted C_{1-6} alkylidene chain wherein one or two methylene units are optionally and independently replaced by $-O-$, $-NR-$, $-S-$, $-SO_2-$, $-COO-$, $-CO-$, $-OSO_2-$, $-NRSO_2$, $-CONR-$, or $-SO_2NR-$, and R^7 is R' or halogen; or

k) Ar^1 is ring **a**, **b**, **e**, **g**, **h**, **i**, **j**, **k**, **r**, **cc**, **dd**, **ff**, **jj**, **ll**, or **pp**, wherein t is 0, 1, 2, or 3, and each occurrence of TR^7 is independently $-C_{1-3}alkyl$, $-OR'$, $-SR'$, $-CF_3$, $-OCF_3$, $-SCF_3$, $-F$, $-Cl$, I , $-Br$, $-COOR'$, $-COR'$, $-O(CH_2)_4N(R)(R')$, $-O(CH_2)_3N(R)(R')$, $-O(CH_2)_2N(R)(R')$, $-O(CH_2)N(R)(R')$, $-O(CH_2)_4CON(R)(R')$, $-O(CH_2)_3CON(R)(R')$, $-O(CH_2)_2CON(R)(R')$, $-O(CH_2)CON(R)(R')$, $-C(O)N(R)(R')$, $-(CH_2)_4OR'$, $-(CH_2)_3OR'$, $-(CH_2)_2OR'$, $-CH_2OR'$, optionally substituted phenyl or benzyl, $-N(R)(R')$, $-(CH_2)_4N(R)(R')$, $-(CH_2)_3N(R)(R')$, $-(CH_2)_2N(R)(R')$, $-(CH_2)N(R)(R')$, or $SO_2N(R)(R')$, $NRSO_2R'$, $CON(R)(R')$, or $-OSO_2R'$.

37. (Original) The compound of claim 34 or 35, q is 1, and Ar^1 is optionally substituted phenyl and compounds of general formula **XIV-A** through **XIX-A** are provided:

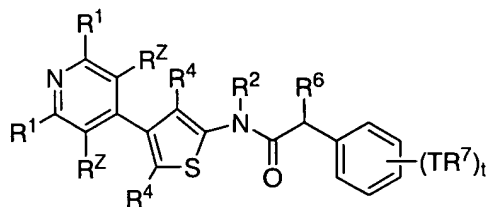


XIV-A

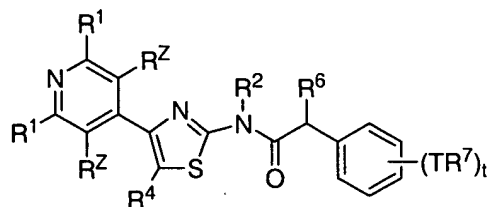


XV-A

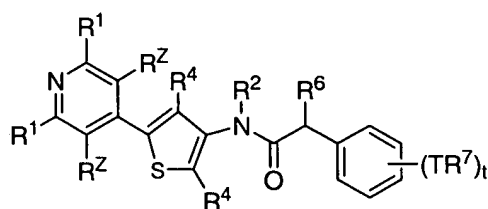
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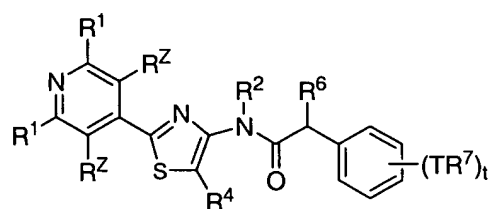
XVI-A



XVII-A



XVIII-A



XIX-A

wherein:

each occurrence of R^1 is hydrogen;

each occurrence of R^2 is hydrogen;

R^2 is hydrogen, or is U_nR' , where n is 1, and U is $-CH_2-$, $-CH_2CH_2-$, $-CH_2CH_2CH_2-$, $-CH_2CH_2CH_2CH_2-$, $-CH_2O-$, $-CH_2S-$, $-CH_2NR-$, $-CH_2CH_2O-$, $-CH_2CH_2S-$, $-CH_2CH_2NR-$, $-CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2NR-$, $-CH_2CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2CH_2NR-$, $-CH_2CH_2OCH_2CH_2-$, $-(CH_2)_4NHCH_2-$, $-(CH_2)_3NHCH_2CH_2-$, or $-CH_2CH_2NHCH_2CH_2-$, and R' groups are hydrogen, C_1 - C_4 alkyl, optionally substituted tetrahydropyranyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, pyridinyl, phenyl, or cyclohexyl, or R and R' , taken together with the nitrogen atom to which they are bound, form an optionally substituted 5- or 6-membered heterocyclyl ring;

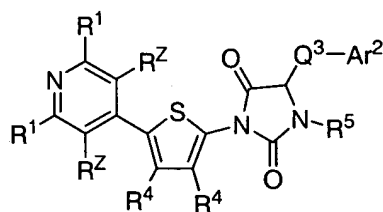
each occurrence of R^4 is independently hydrogen, C_{1-6} aliphatic, CN, COR, COOR, $CON(R)_2$, or halogen;

R^6 is R' , $-N(R)(R')$, $-(CH_2)_{1-4}N(R)(R')$, $-OR'$, $-(CH_2)_{1-4}OR'$, $-NR(CH_2)_{1-4}N(R)(R')$, $-NR(CH_2)_{1-4}SO_2R'$, $-NR(CH_2)_{1-4}COOR'$, or $-NR(CH_2)_{1-4}COR'$; and

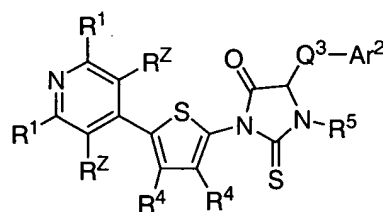
Applicants: Jingrong Cao et al.
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t is 0, 1, 2, or 3, and each occurrence of TR⁷ is independently -C₁₋₃alkyl, -OR', -SR', -CF₃, -OCF₃, -SCF₃, -F, -Cl, I, -Br, -COOR', -COR', -O(CH₂)₄N(R)(R'), -O(CH₂)₃N(R)(R'), -O(CH₂)₂N(R)(R'), -O(CH₂)N(R)(R'), -O(CH₂)₄CON(R)(R'), -O(CH₂)₃CON(R)(R'), -O(CH₂)₂CON(R)(R'), -O(CH₂)CON(R)(R'), -C(O)N(R)(R'), -(CH₂)₄OR', -(CH₂)₃OR', -(CH₂)₂OR', -CH₂OR', optionally substituted phenyl or benzyl, -N(R)(R'), -(CH₂)₄N(R)(R'), -(CH₂)₃N(R)(R'), -(CH₂)₂N(R)(R'), -(CH₂)N(R)(R'), or SO₂N(R)(R'), NRSO₂R', CON(R)(R'), or -OSO₂R'.

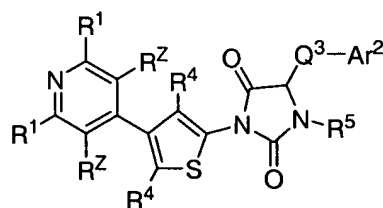
38. (Original) The compound of claim 1, wherein R² and Q¹-R³, taken together with the atoms to which they are bound form a 5-membered cyclic group, and compounds have the general formula XX through XXV:



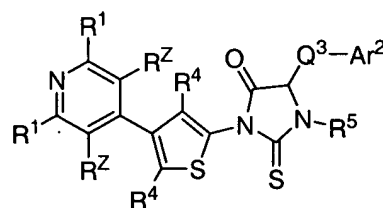
XX



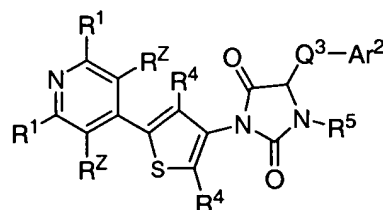
XXI



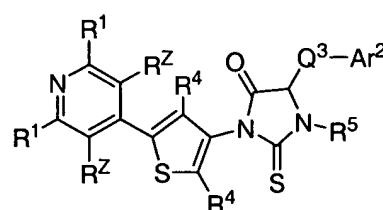
XXII



XXIII



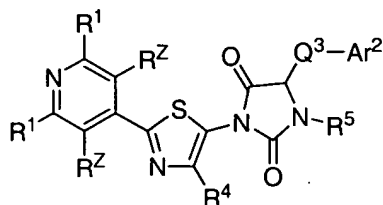
XXIV



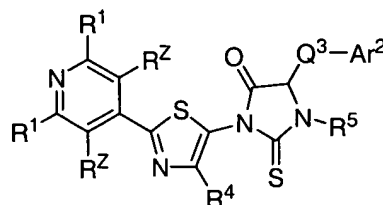
XXV

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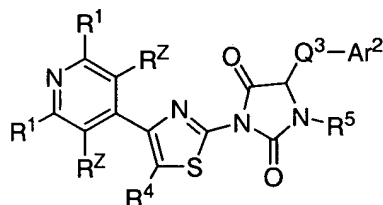
39. (Original) The compound of claim 1, R^2 and Q^1-R^3 , taken together with the atoms to which they are bound form a 5-membered cyclic group, and compounds have the general formula **XXVI** through **XXXI**:



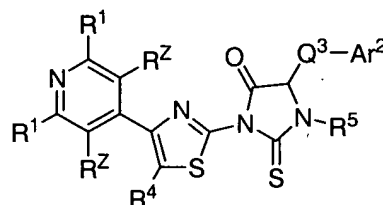
XXVI



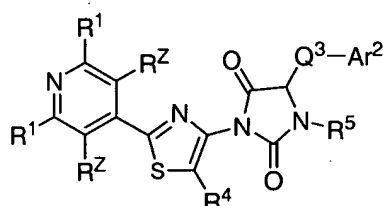
XXVII



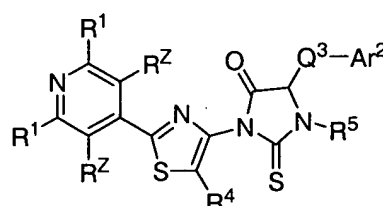
XXVIII



XXIX

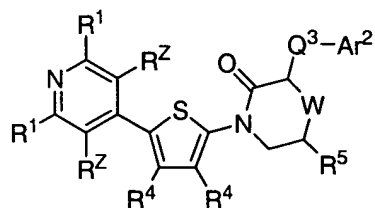


XXX

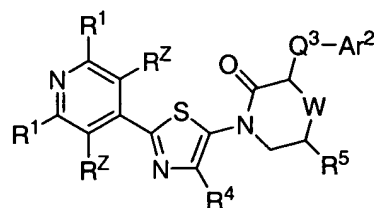


XXXI

40. (Original) The compound of claim 1, wherein R^2 and Q^1-R^3 , taken together with the atoms to which they are bound form a 6-membered cyclic group, and compounds have the general formula **XXXII** through **XXXVII**:

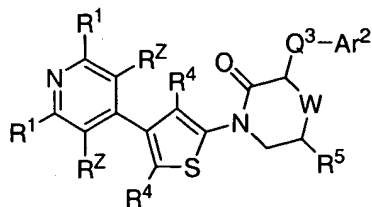


XXXII

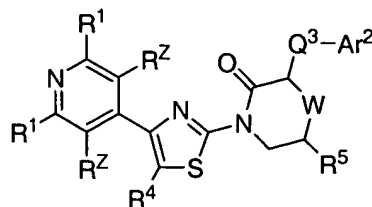


XXXIII

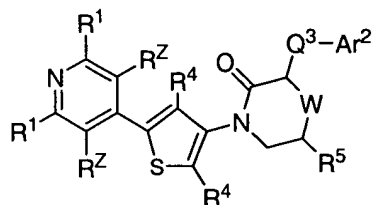
Applicants: Jingrong Cao et al.
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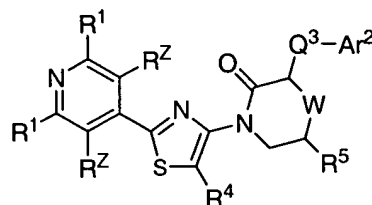
XXXIV



XXXV



XXXVI



XXXVII

wherein W is O, NR⁵, or CHR⁵.

41. (Original) The compound of claims 38, 39 or 40, wherein compound variables are selected from one of more of the following groups:

- a) each occurrence of R¹ is independently hydrogen, halogen, optionally substituted C₁-C₄aliphatic, OR, SR, or N(R)₂;
- b) each occurrence of R^Z is independently hydrogen, halogen, optionally substituted C₁-C₄aliphatic, OH, OR' or N(R)(R');
- c) each occurrence of R⁴ is independently hydrogen, C₁₋₆aliphatic, CN, COR, COOR, CON(R)₂, or halogen;
- d) R⁵ is hydrogen, (CH₂)₃OR', (CH₂)₂OR', (CH₂)OR', (CH₂)₃N(R')₂, (CH₂)₂N(R')₂, (CH₂)N(R')₂, or C₁₋₄aliphatic;
- e) Q³ is a direct bond, or is -(CHR⁶)_q-, -(CHR⁶)_qO-, -(CHR⁶)_qS-, -(CHR⁶)_qS(O)₂-, -(CHR⁶)_qS(O)-, -(CHR⁶)_qNR-, or -(CHR⁶)_qC(O)-, wherein q is 0, 1, 2, or 3; and
- f) Ar² is ring a, b, e, g, h, i, j, k, n, r, cc, dd, ff, jj, ll, or pp, wherein t is 0, 1, 2, or 3, and T is a bond or is an optionally substituted C₁₋₆ alkylidene chain wherein one or two methylene units are optionally and independently replaced by -O-, -NR-, -

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S-, -SO₂-, -COO-, -CO-, -OSO₂-, -NRSO₂-, -CONR-, or -SO₂NR-, and R⁷ is R' or halogen.

42. (Original) The compound of claims 38, 39 or 40, wherein compound variables are selected from one of more of the following groups:

a) each occurrence of R¹ is independently hydrogen, halogen, -CH₃, -CH₂CH₃, -OH, -OCH₃, -SCH₃, -NH₂, -N(CH₃)₂, -N(CH₂CH₃)₂, NH(CH₂)₂NHCH₃, NH(cyclopropyl), NH(CH₂)cyclopropyl, or NH(CH₂)₂N(CH₃)₂;

b) each occurrence of R^Z is independently hydrogen, halogen, Me, OH, OMe, NH₂, or N(Me)₂;

c) each occurrence of R⁴ is independently hydrogen, C₁₋₆aliphatic, CN, COR, COOR, CON(R)₂, or halogen;

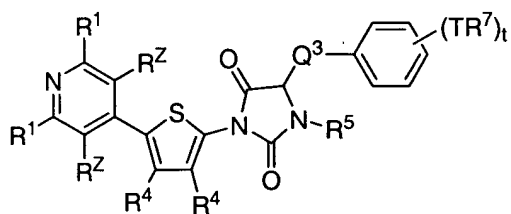
d) R⁵ is hydrogen, (CH₂)₃OR', (CH₂)₂OR', (CH₂)OR', (CH₂)₃N(R')₂, (CH₂)₂N(R')₂, (CH₂)N(R')₂, or C₁₋₄aliphatic;

e) Q³ is a direct bond, or is -(CHR⁶)_q-, -(CHR⁶)_qO-, -(CHR⁶)_qS-, -(CHR⁶)_qS(O)₂-, -(CHR⁶)_qS(O)-, -(CHR⁶)_qNR-, or -(CHR⁶)_qC(O)-, wherein q is 0, 1, 2, or 3; and

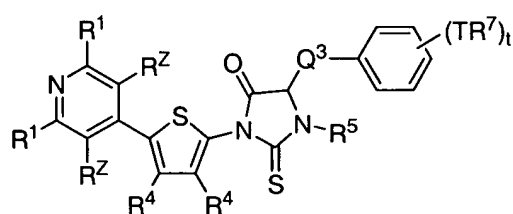
f) Ar² is ring **a**, **b**, **e**, **g**, **h**, **i**, **j**, **k**, **n**, **r**, **cc**, **dd**, **ff**, **jj**, **ll**, or **pp**, wherein t is 0, 1, 2, or 3, and each occurrence of TR⁷ is independently -C₁₋₃alkyl, -OR', -SR', -CF₃, -OCF₃, -SCF₃, -F, -Cl, I, -Br, -COOR', -COR', -O(CH₂)₄N(R)(R'), -O(CH₂)₃N(R)(R'), -O(CH₂)₂N(R)(R'), -O(CH₂)N(R)(R'), -O(CH₂)₄CON(R)(R'), -O(CH₂)₃CON(R)(R'), -O(CH₂)₂CON(R)(R'), -O(CH₂)CON(R)(R'), -C(O)N(R)(R'), -(CH₂)₄OR', -(CH₂)₃OR', -(CH₂)₂OR', -CH₂OR', optionally substituted phenyl or benzyl, -N(R)(R'), -(CH₂)₄N(R)(R'), -(CH₂)₃N(R)(R'), -(CH₂)₂N(R)(R'), -(CH₂)N(R)(R'), or SO₂N(R)(R'), NRSO₂R', CON(R)(R'), or -OSO₂R'.

43. (Original) The compound of claims 38, 39 or 40, wherein Ar² is optionally substituted phenyl and compounds of general formula **XX-A**, through **XXXVII** are provided:

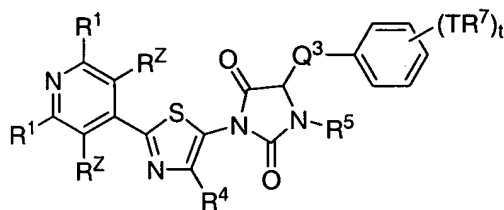
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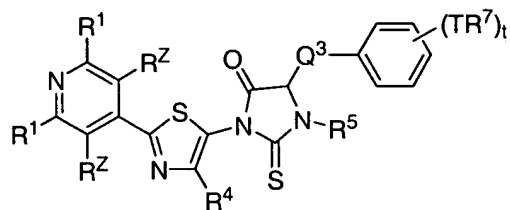
XX-A



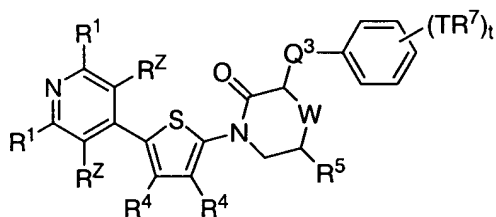
XXI-A



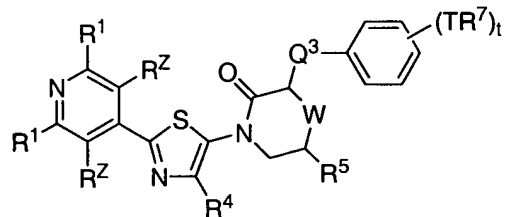
XXII-A



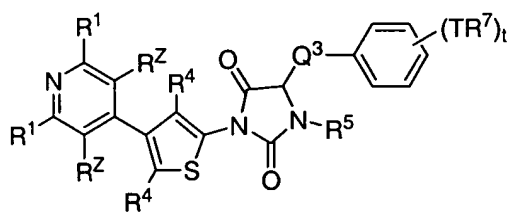
XXIII-A



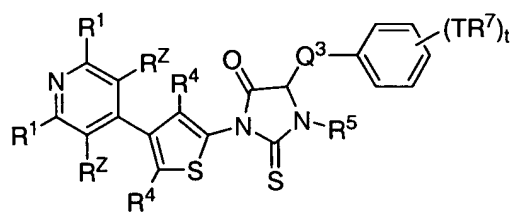
XXIV-A



XXV-A

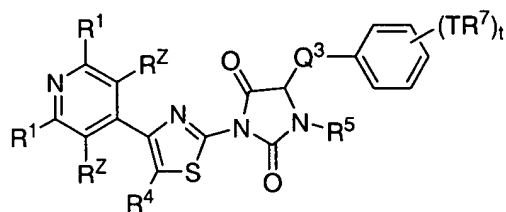


XXVI-A

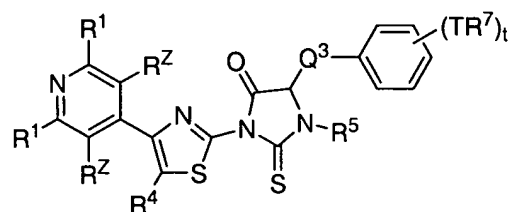


XXVII-A

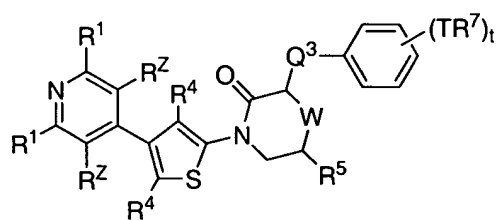
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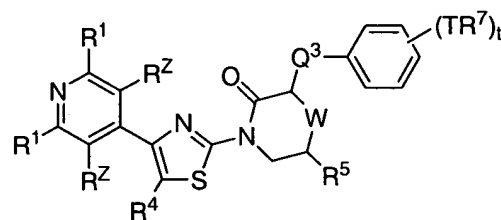
XXVIII-A



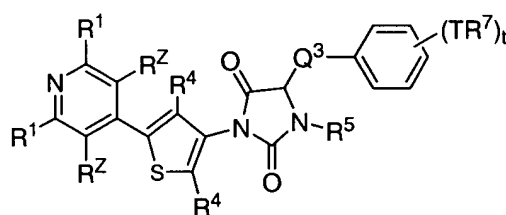
XXIX-A



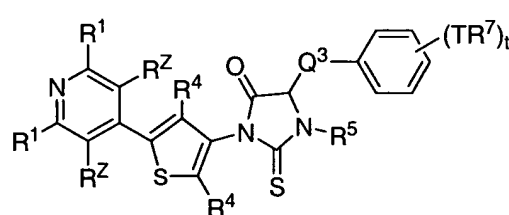
XXX-A



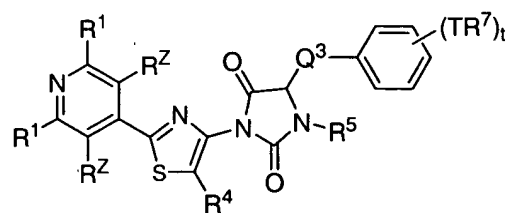
XXXI-A



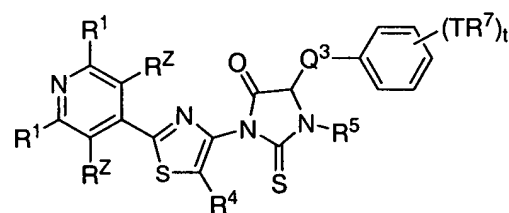
XXXII-A



XXXIII-A

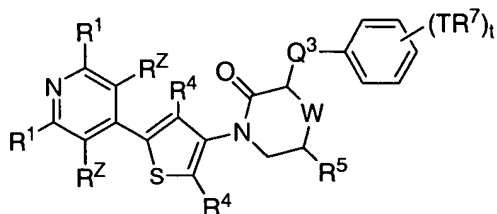


XXXIV-A

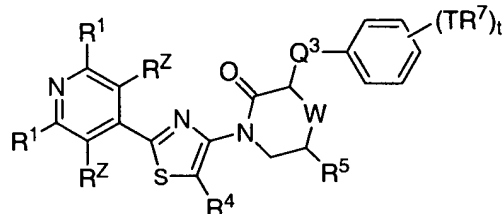


XXXV-A

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XXXVI-A



XXXVII-A

44. (Original) The compound of claim 43, wherein compound variables are selected from:

each occurrence of R^1 is hydrogen;

each occurrence of R^Z is hydrogen;

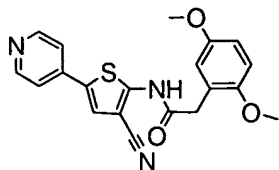
each occurrence of R^4 is independently hydrogen, C_{1-6} aliphatic, CN, COR, COOR, CON(R)₂, or halogen;

R^5 is hydrogen, $(CH_2)_3OR'$, $(CH_2)_2OR'$, $(CH_2)OR'$, $(CH_2)_3N(R')_2$, $(CH_2)_2N(R')_2$, $(CH_2)N(R')_2$, or C_{1-4} aliphatic;

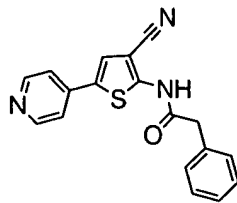
Q^3 is a direct bond, or is $-(CHR^6)_q-$, $-(CHR^6)_qO-$, $-(CHR^6)_qS-$, $-(CHR^6)_qS(O)_2-$, $-(CHR^6)_qS(O)-$, $-(CHR^6)_qNR-$, or $-(CHR^6)_qC(O)-$, wherein q is 0, 1, 2, or 3; and

t is 0, 1, 2, or 3, and each occurrence of TR^7 is independently $-C_{1-3}$ alkyl, $-OR'$, $-SR'$, $-CF_3$, $-OCF_3$, $-SCF_3$, $-F$, $-Cl$, I , $-Br$, $-COOR'$, $-COR'$, $-O(CH_2)_4N(R)(R')$, $-O(CH_2)_3N(R)(R')$, $-O(CH_2)_2N(R)(R')$, $-O(CH_2)N(R)(R')$, $-O(CH_2)_4CON(R)(R')$, $-O(CH_2)_3CON(R)(R')$, $-O(CH_2)_2CON(R)(R')$, $-O(CH_2)CON(R)(R')$, $-C(O)N(R)(R')$, $-(CH_2)_4OR'$, $-(CH_2)_3OR'$, $-(CH_2)_2OR'$, $-CH_2OR'$, optionally substituted phenyl or benzyl, $-N(R)(R')$, $-(CH_2)_4N(R)(R')$, $-(CH_2)_3N(R)(R')$, $-(CH_2)_2N(R)(R')$, $-(CH_2)N(R)(R')$, or $SO_2N(R)(R')$, $NRSO_2R'$, $CON(R)(R')$, or $-OSO_2R'$.

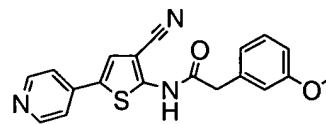
45. (Previously amended) The compound of claim 1, having one of the structures:



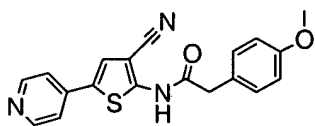
I-A-1



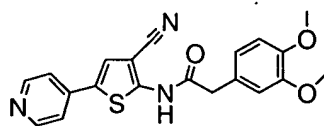
I-A-2



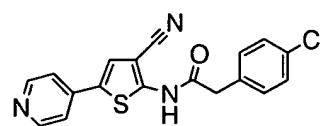
I-A-3



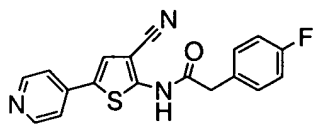
I-A-4



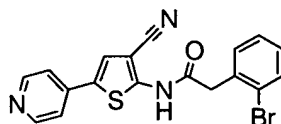
I-A-5



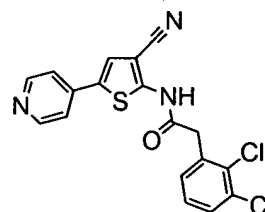
I-A-6



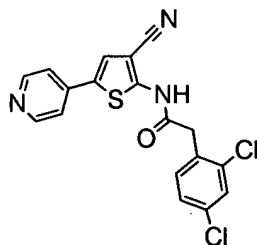
I-A-7



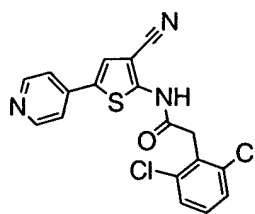
I-A-8



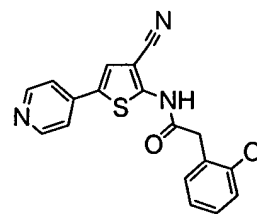
I-A-9



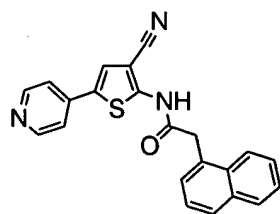
I-A-10



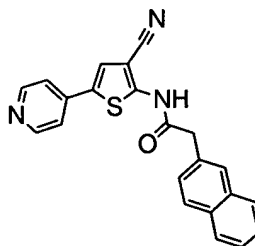
I-A-11



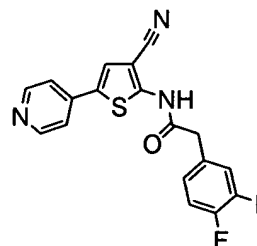
I-A-12



I-A-13

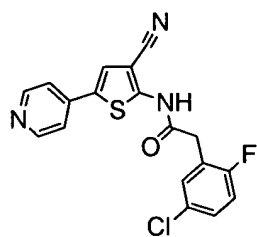


I-A-14

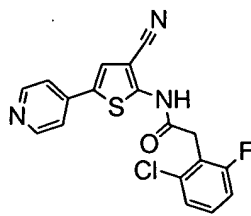


I-A-15

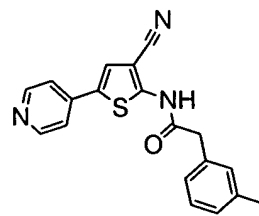
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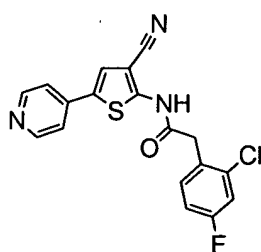
I-A-16



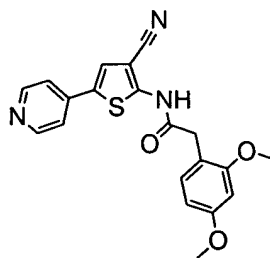
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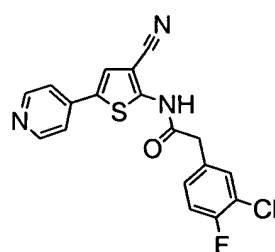
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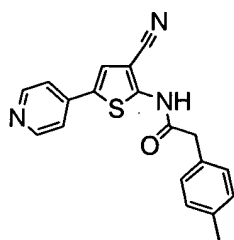
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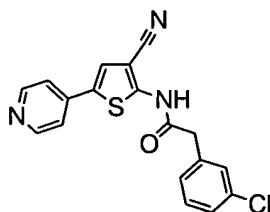
I-A-20



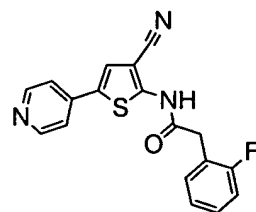
I-A-21



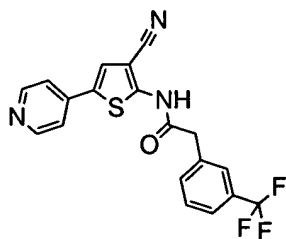
I-A-22



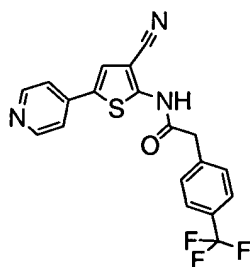
I-A-23



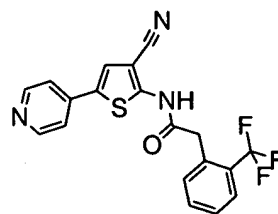
I-A-24



I-A-25

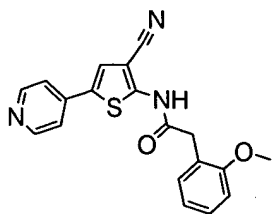


I-A-26

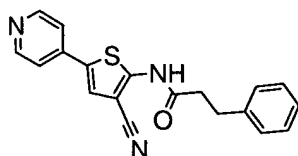


I-A-27

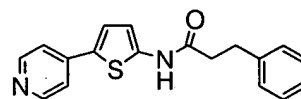
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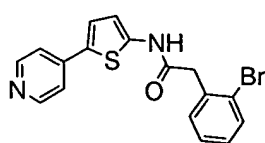
I-A-28



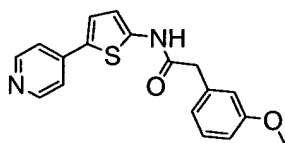
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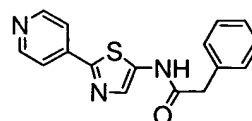
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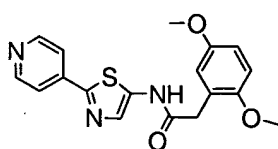
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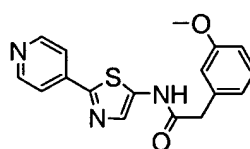
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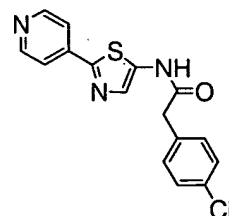
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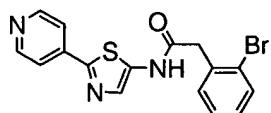
I-A-34



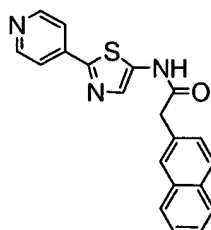
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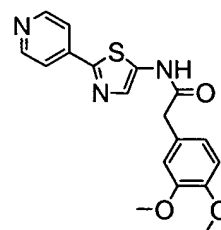
I-A-36



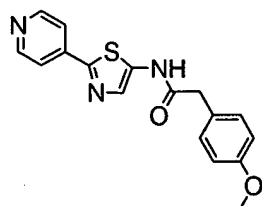
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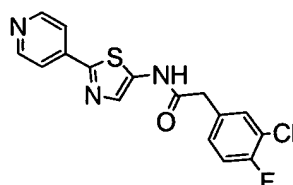
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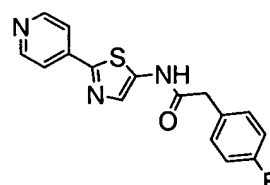
I-A-39



I-A-40

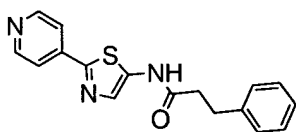


I-A-41

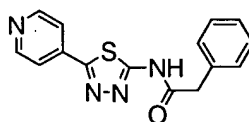


I-A-42

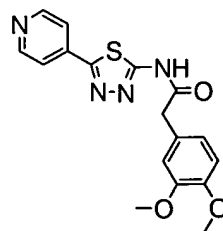
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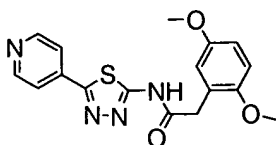
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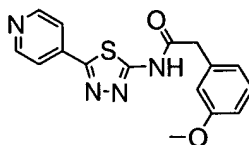
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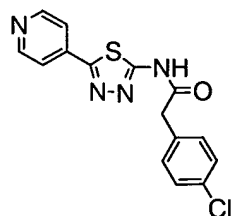
I-A-45



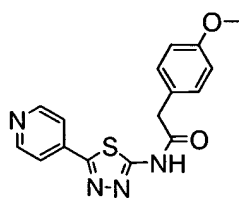
I-A-46



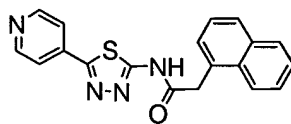
I-A-47



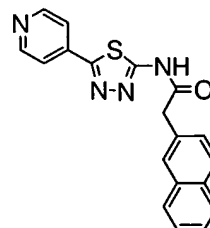
I-A-48



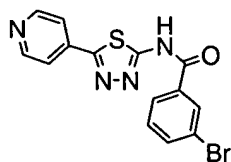
I-A-49



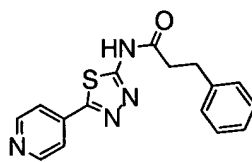
I-A-50



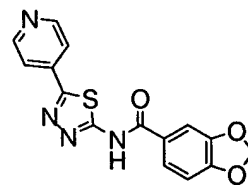
I-A-51



I-A-52

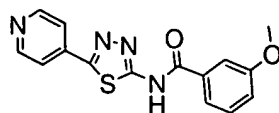


I-A-53

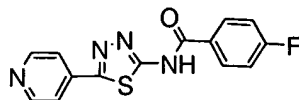


I-A-54

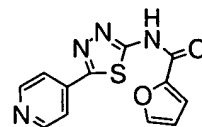
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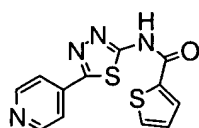
I-A-55



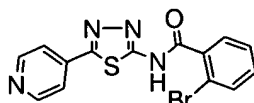
I-A-56



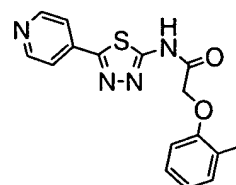
I-A-57



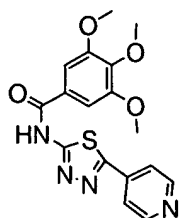
I-A-58



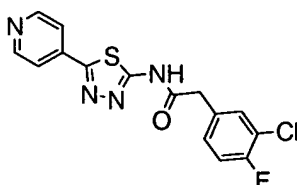
I-A-59



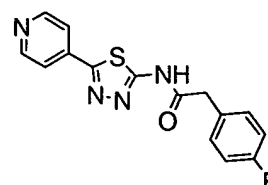
I-A-60



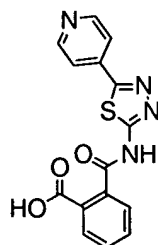
I-A-61



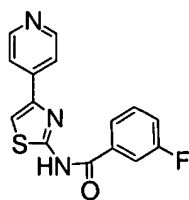
I-A-62



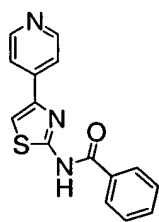
I-A-63



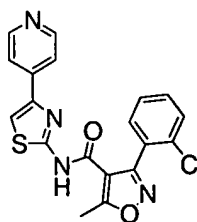
I-A-64



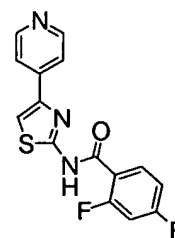
I-B-1



I-B-2

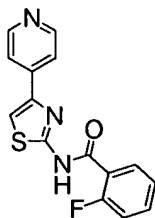


I-B-3

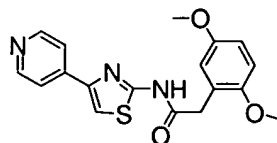


I-B-4

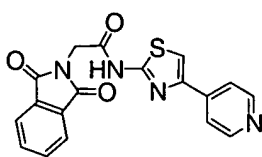
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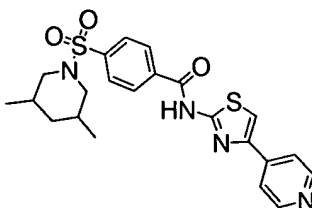
I-B-5



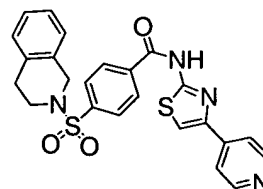
I-B-6



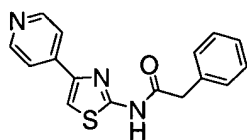
I-B-11



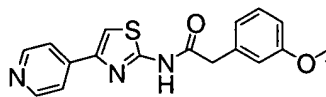
I-B-12



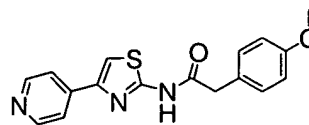
I-B-13



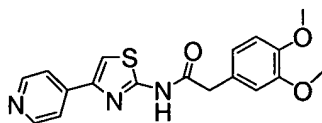
I-B-19



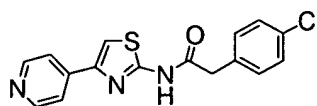
I-B-20



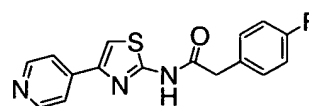
I-B-21



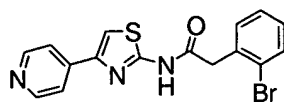
I-B-22



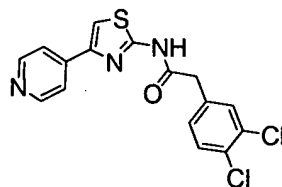
I-B-23



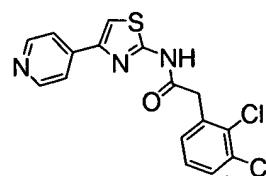
I-B-24



I-B-25

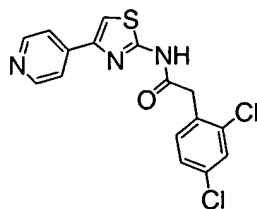


I-B-26

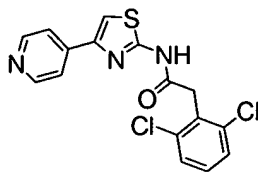


I-B-27

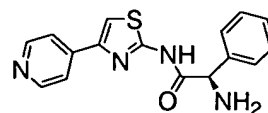
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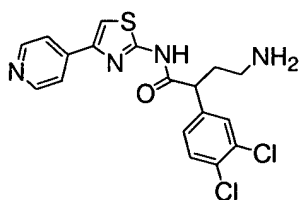
I-B-28



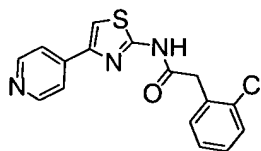
I-B-29



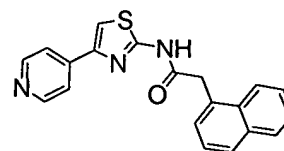
I-B-30



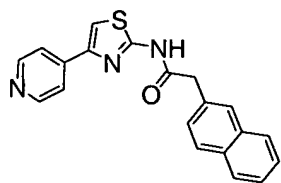
I-B-31



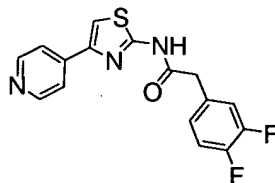
I-B-32



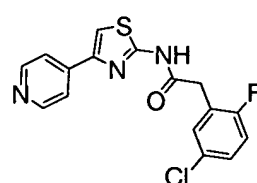
I-B-33



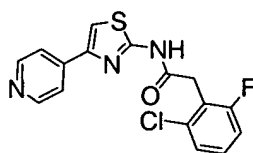
I-B-34



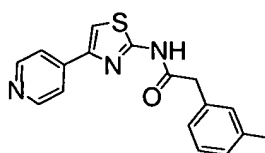
I-B-35



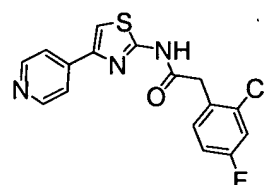
I-B-36



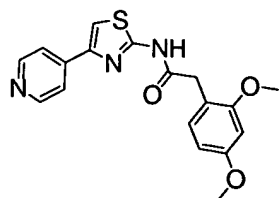
I-B-37



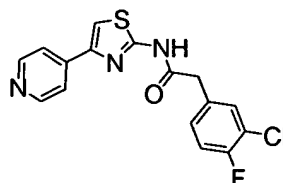
I-B-38



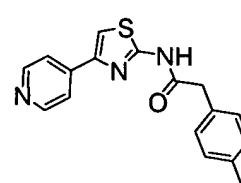
I-B-39



I-B-40

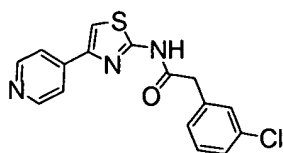


I-B-41

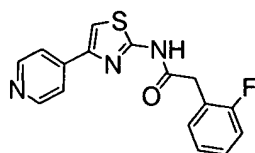


I-B-42

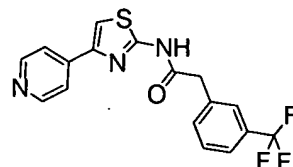
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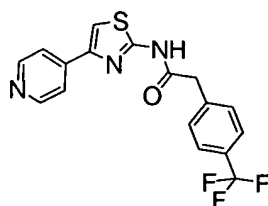
I-B-43



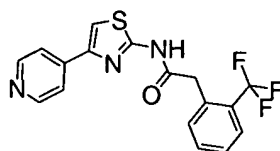
I-B-44



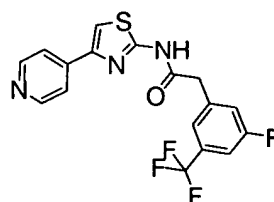
I-B-45



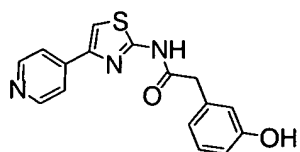
I-B-46



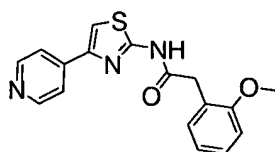
I-B-47



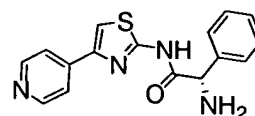
I-B-48



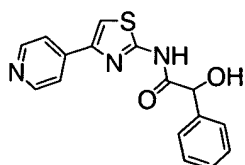
I-B-49



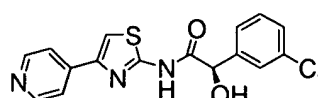
I-B-50



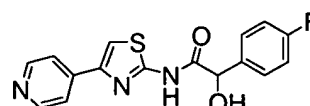
I-B-51



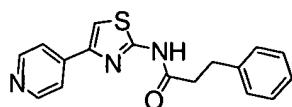
I-B-52



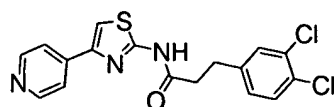
I-B-53



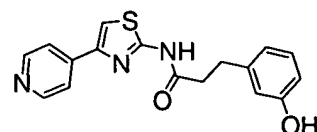
I-B-54



I-B-55

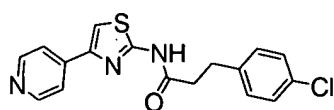


I-B-56

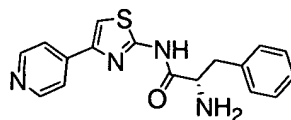


I-B-57

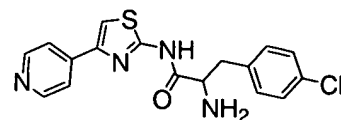
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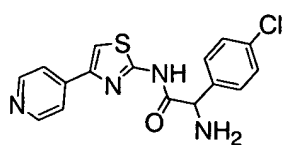
I-B-58



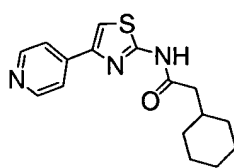
I-B-59



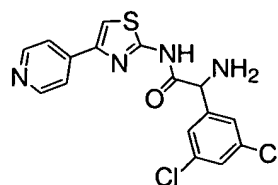
I-B-60



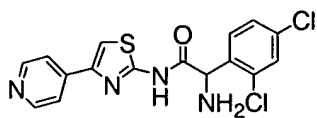
I-B-61



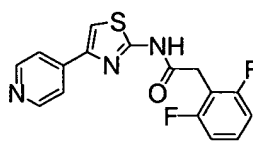
I-B-62



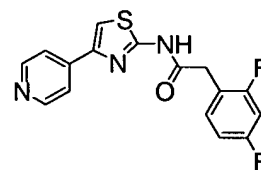
I-B-63



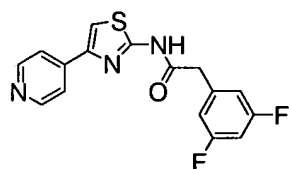
I-B-64



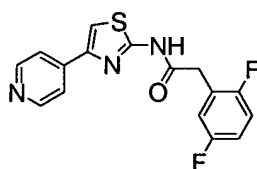
I-B-65



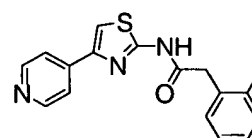
I-B-66



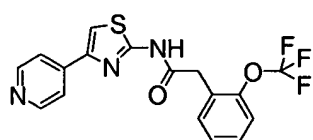
I-B-67



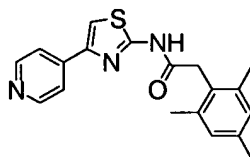
I-B-68



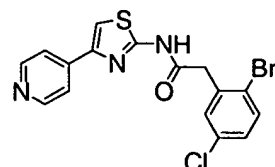
I-B-69



I-B-70

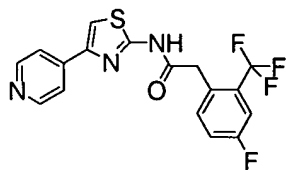


I-B-71

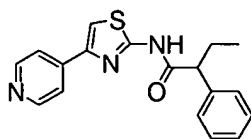


I-B-72

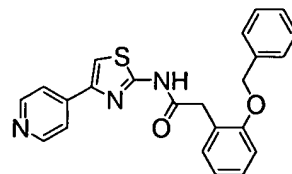
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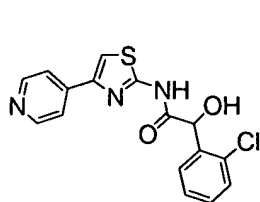
I-B-73



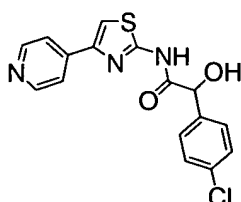
I-B-74



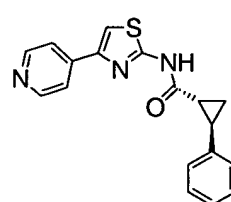
I-B-75



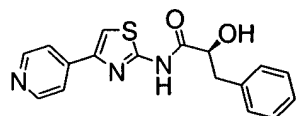
I-B-76



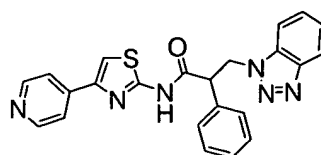
I-B-77



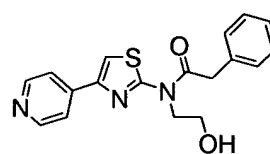
I-B-78



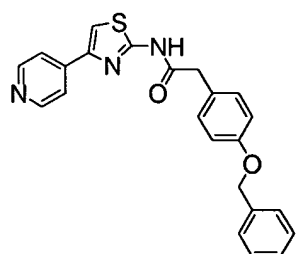
I-B-79



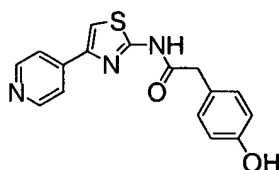
I-B-80



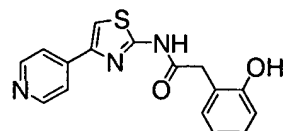
I-B-81



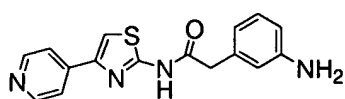
I-B-82



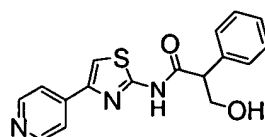
I-B-83



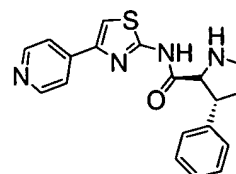
I-B-84



I-B-85

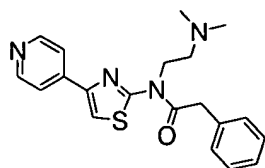


I-B-86

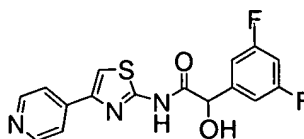


I-B-87

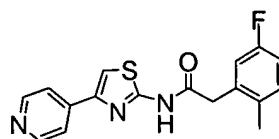
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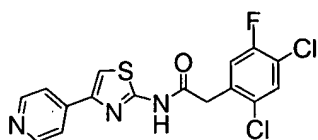
I-B-88



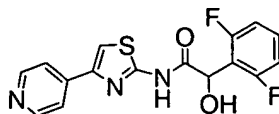
I-B-89



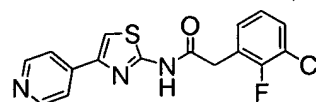
I-B-90



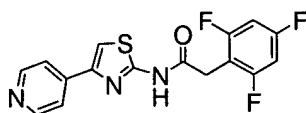
I-B-91



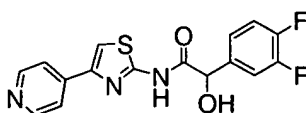
I-B-92



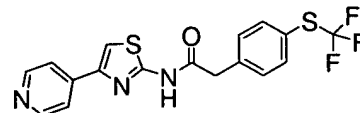
I-B-93



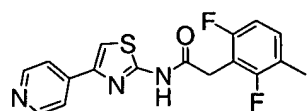
I-B-94



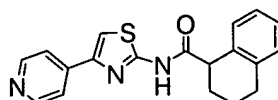
I-B-95



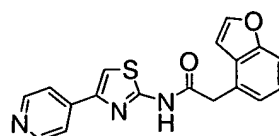
I-B-96



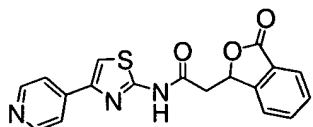
I-B-97



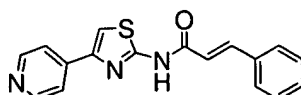
I-B-98



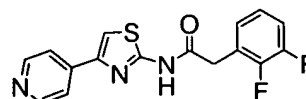
I-B-99



I-B-100

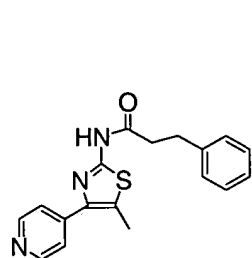


I-B-101

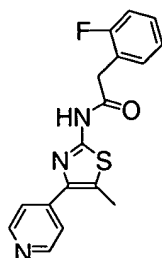


I-B-102

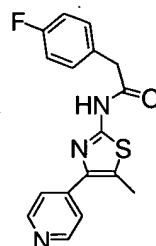
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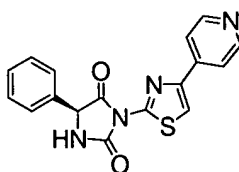
I-B-103



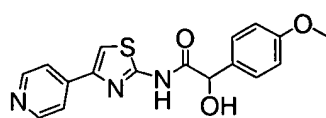
I-B-104



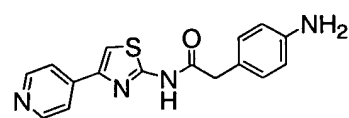
I-B-105



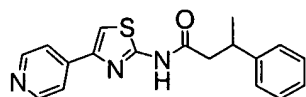
I-B-106



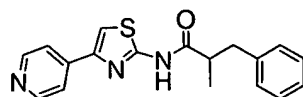
I-B-107



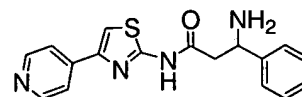
I-B-108



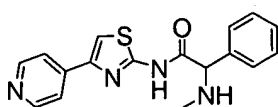
I-B-109



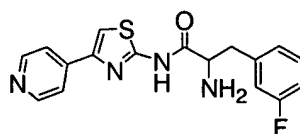
I-B-110



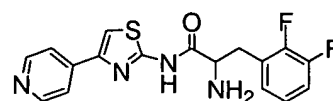
I-B-111



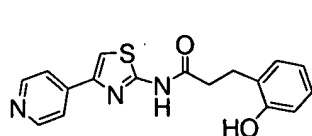
I-B-112



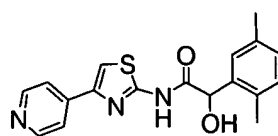
I-B-113



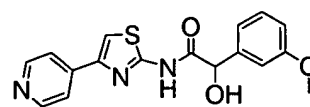
I-B-114



I-B-115

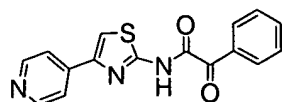


I-B-116

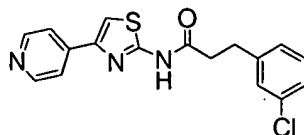


I-B-117

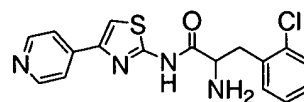
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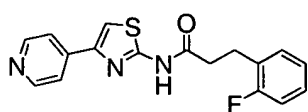
I-B-118



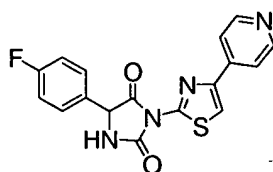
I-B-119



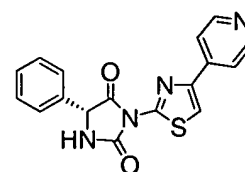
I-B-120



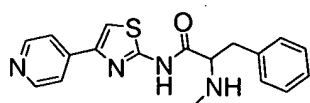
I-B-121



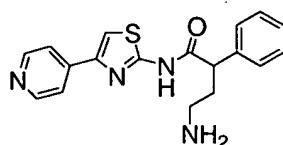
I-B-122



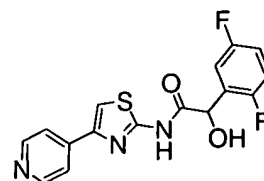
I-B-123



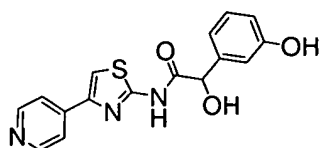
I-B-124



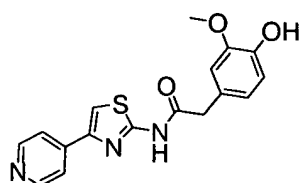
I-B-125



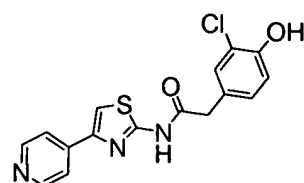
I-B-126



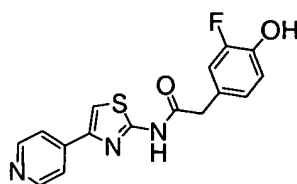
I-B-127



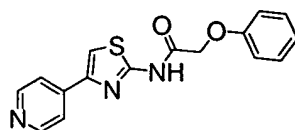
I-B-128



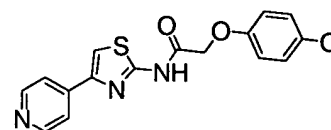
I-B-129



I-B-130

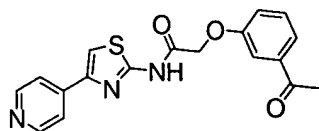


I-B-131

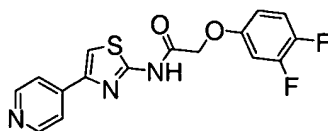


I-B-132

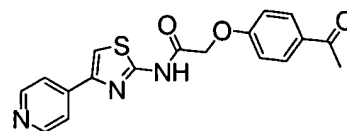
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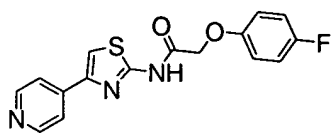
I-B-133



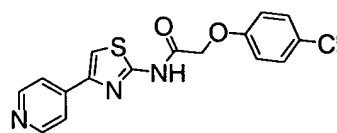
I-B-134



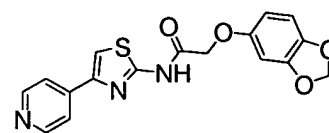
I-B-135



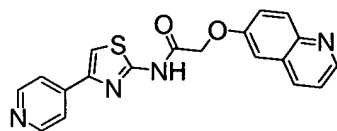
I-B-136



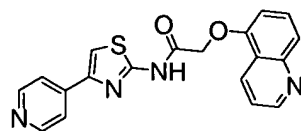
I-B-137



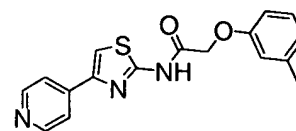
I-B-138



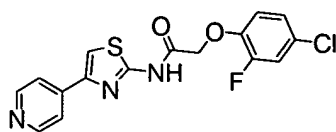
I-B-139



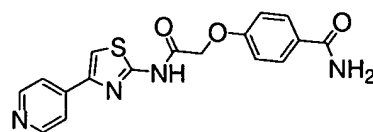
I-B-40



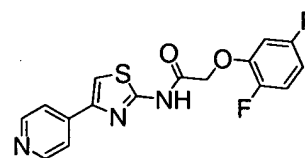
I-B-141



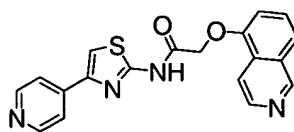
I-B-142



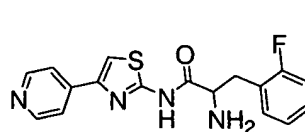
I-B-143



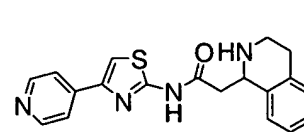
I-B-144



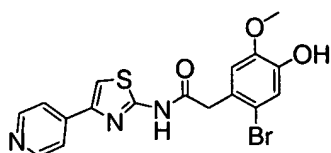
I-B-145



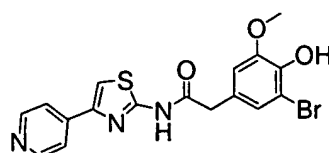
I-B-146



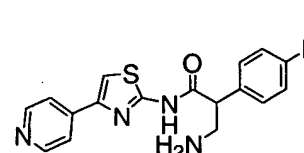
I-B-147



I-B-148

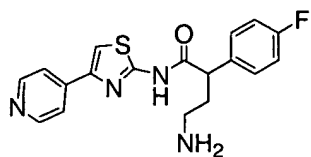


I-B-149

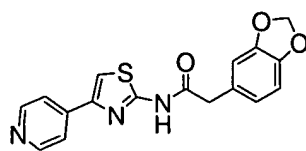


I-B-150

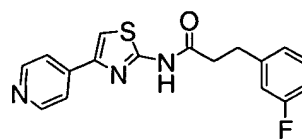
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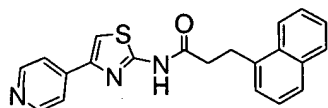
I-B-151



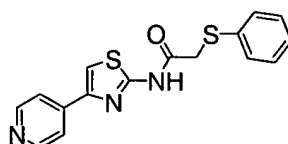
I-B-152



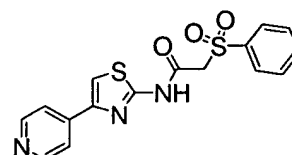
I-B-153



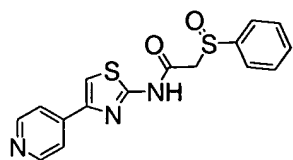
I-B-154



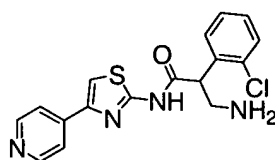
I-B-155



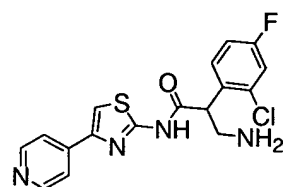
I-B-156



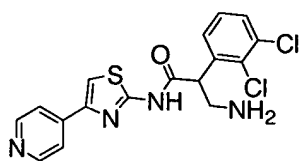
I-B-157



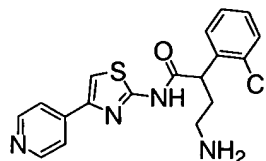
I-B-158



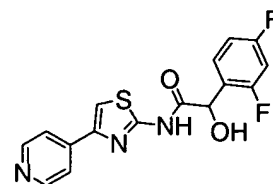
I-B-159



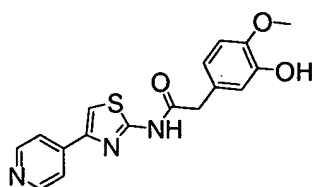
I-B-160



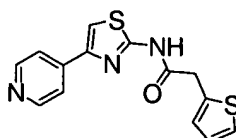
I-B-161



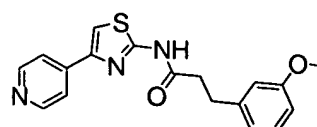
I-B-162



I-B-163

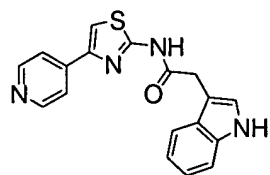


I-B-164

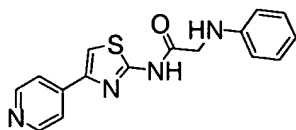


I-B-165

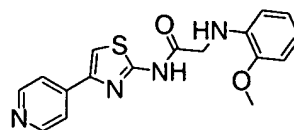
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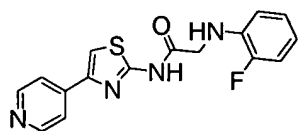
I-B-166



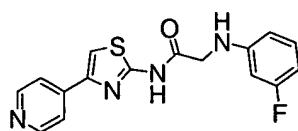
I-B-167



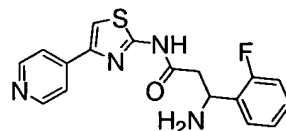
I-B-168



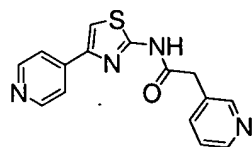
I-B-169



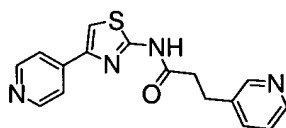
I-B-170



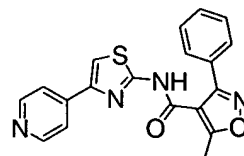
I-B-171



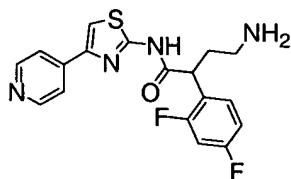
I-B-172



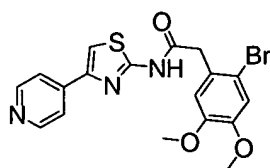
I-B-173



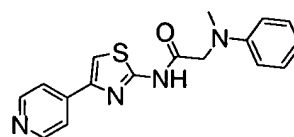
I-B-174



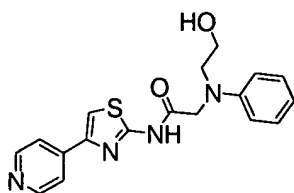
I-B-175



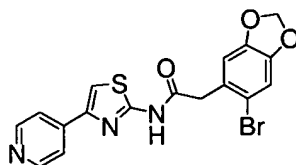
I-B-176



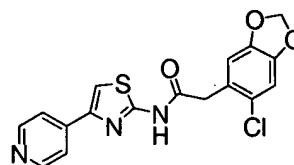
I-B-177



I-B-178

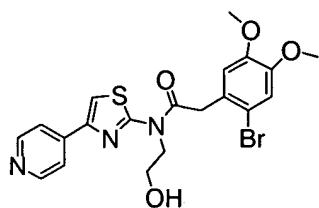


I-B-179

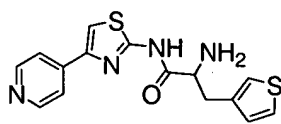


I-B-180

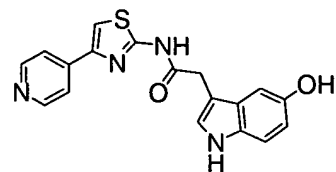
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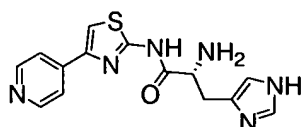
I-B-181



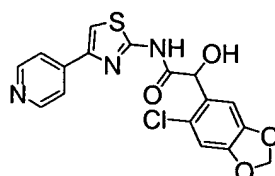
I-B-182



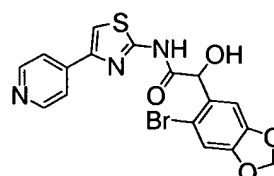
I-B-183



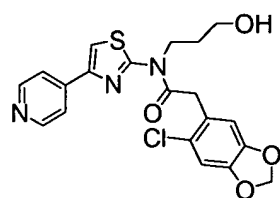
I-B-184



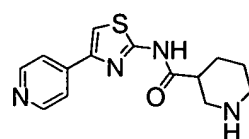
I-B-185



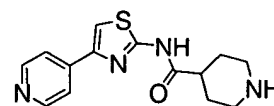
I-B-186



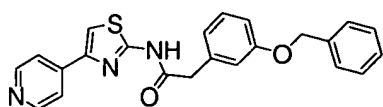
I-B-187



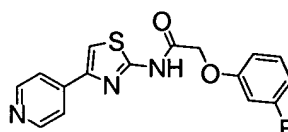
I-B-188



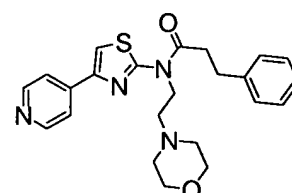
I-B-189



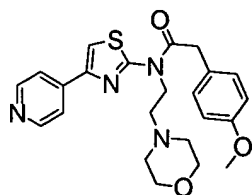
I-B-190



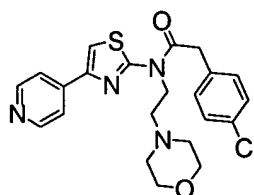
I-B-191



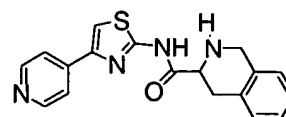
I-B-192



I-B-193

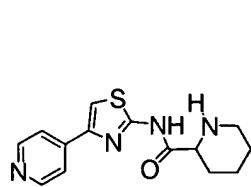


I-B-194

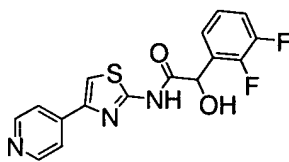


I-B-195

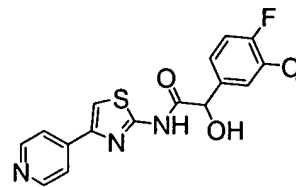
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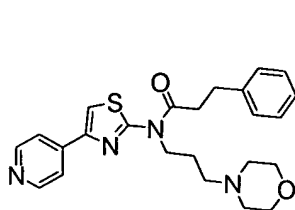
I-B-196



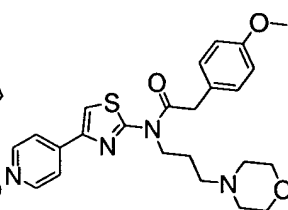
I-B-197



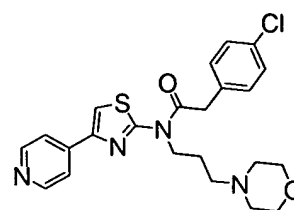
I-B-198



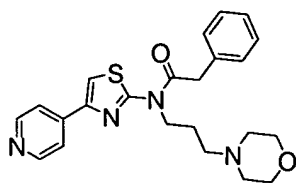
I-B-199



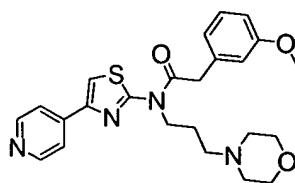
I-B-200



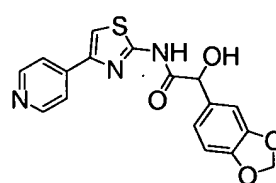
I-B-201



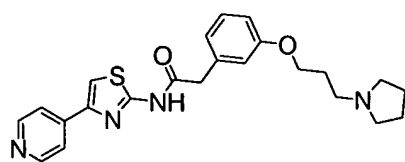
I-B-202



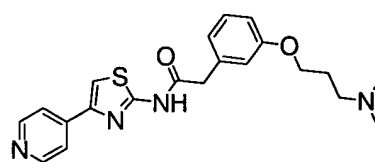
I-B-203



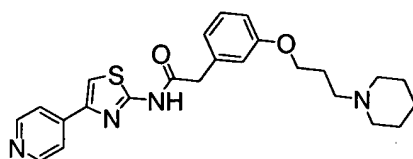
I-B-204



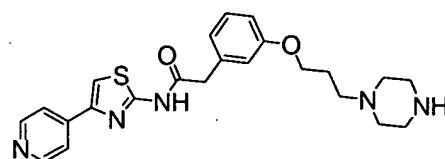
I-B-205



I-B-206

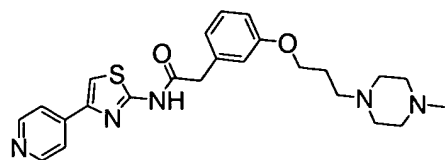


I-B-207

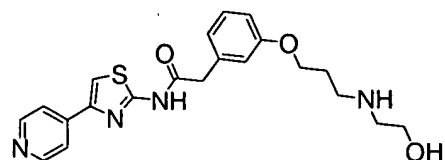


I-B-208

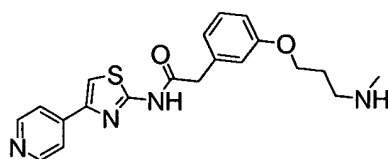
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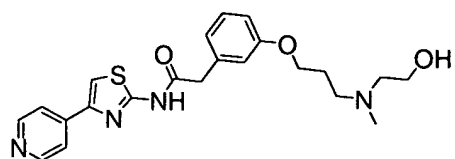
I-B-209



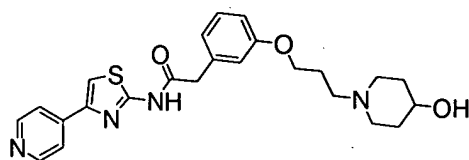
I-B-210



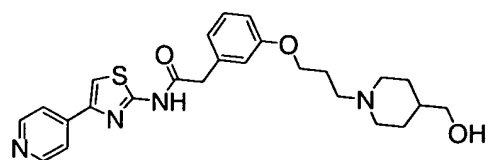
I-B-211



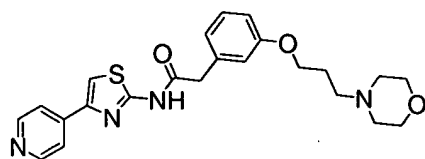
I-B-212



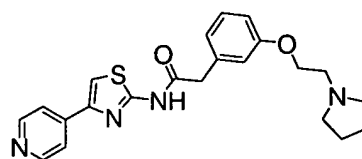
I-B-213



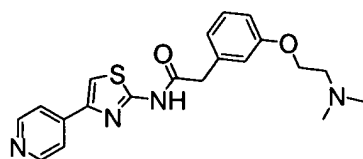
I-B-214



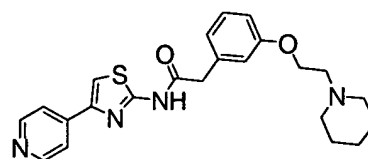
I-B-215



I-B-216

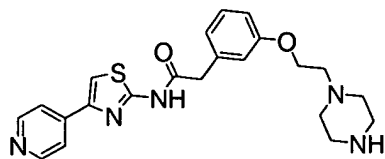


I-B-217

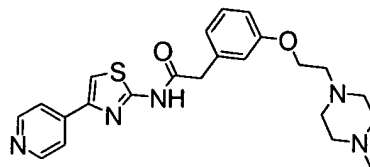


I-B-218

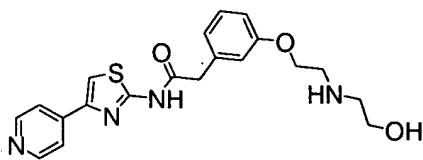
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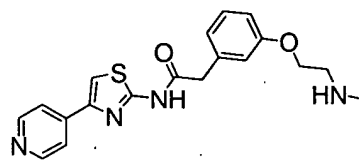
I-B-219



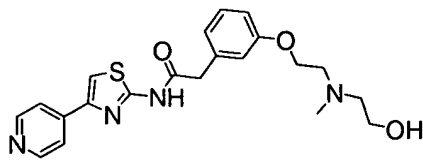
I-B-220



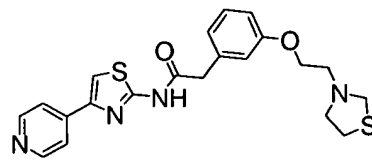
I-B-221



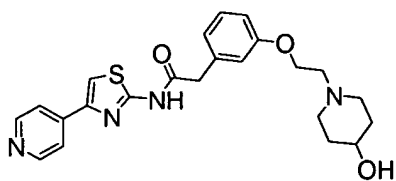
I-B-222



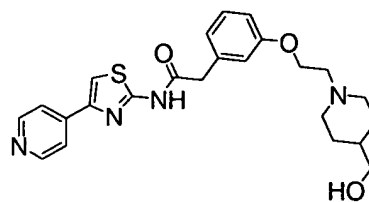
I-B-223



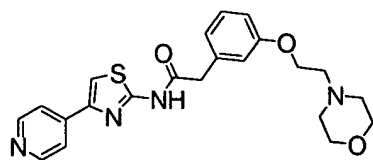
I-B-224



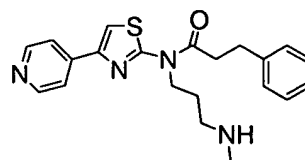
I-B-225



I-B-226

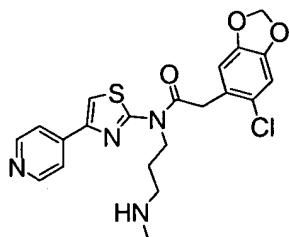


I-B-227

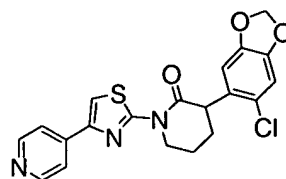


I-B-228

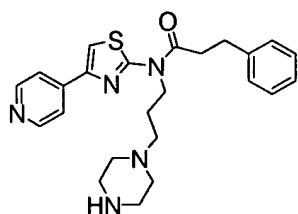
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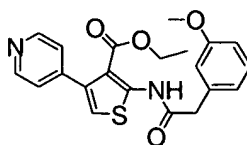
I-B-229



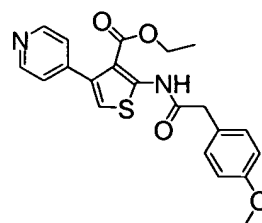
I-B-230



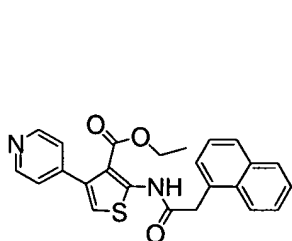
I-B-231



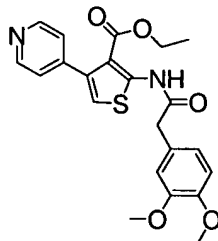
I-B-232



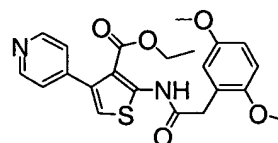
I-B-233



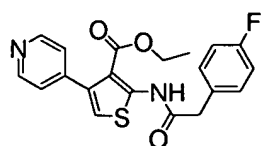
I-B-234



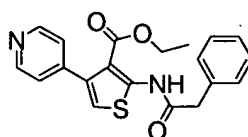
I-B-235



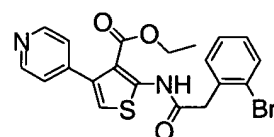
I-B-236



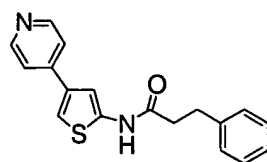
I-B-237



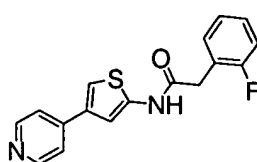
I-B-238



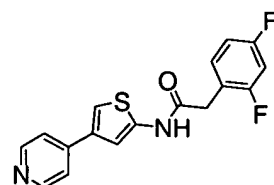
I-B-239



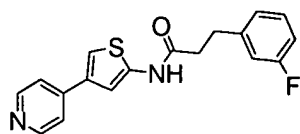
I-B-240



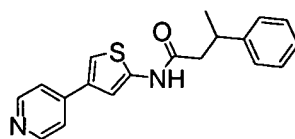
I-B-241



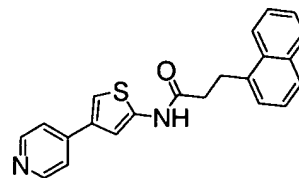
I-B-242



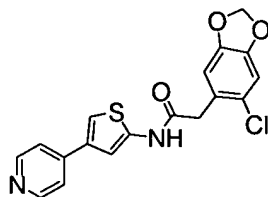
I-B-243



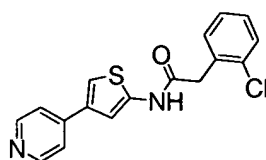
I-B-244



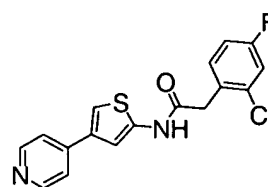
I-B-245



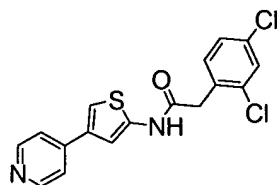
I-B-246



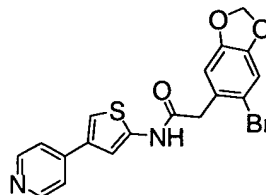
I-B-247



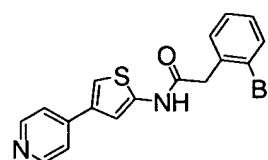
I-B-248



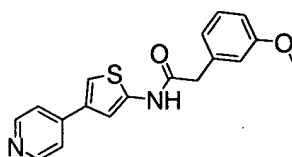
I-B-249



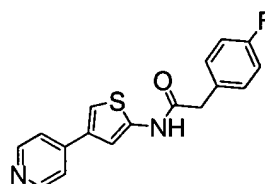
I-B-250



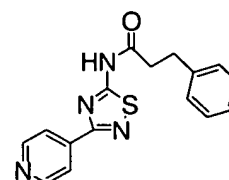
I-B-251



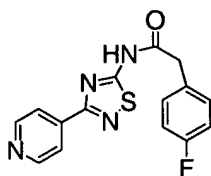
I-B-252



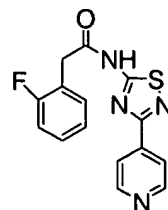
I-B-253



I-B-254

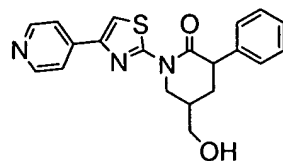


I-B-255

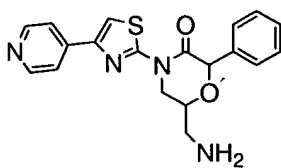


I-B-256

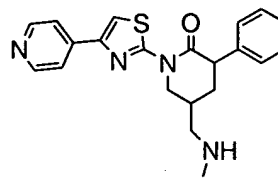
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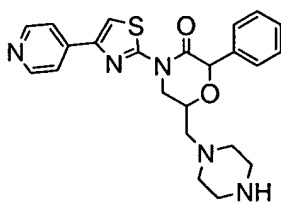
I-B-275



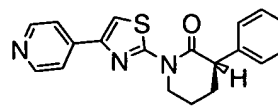
I-B-276



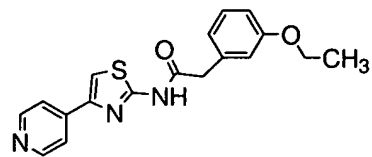
I-B-277



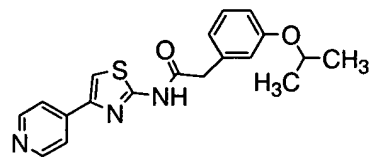
I-B-278



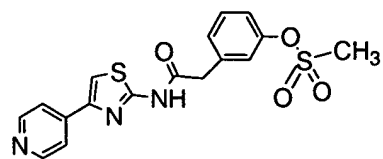
I-B-279



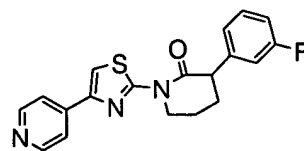
I-B-280



I-B-281

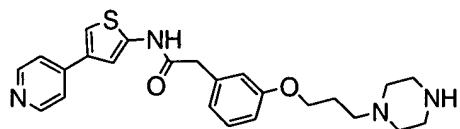


I-B-282

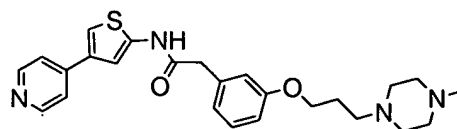


I-B-283

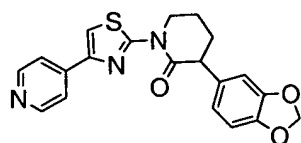
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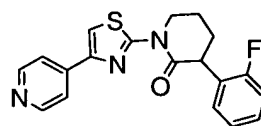
I-B-284



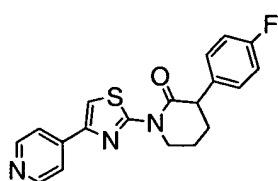
I-B-285



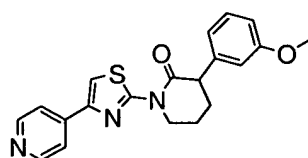
I-B-286



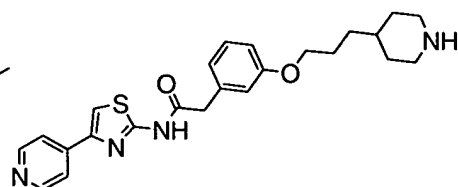
I-B-287



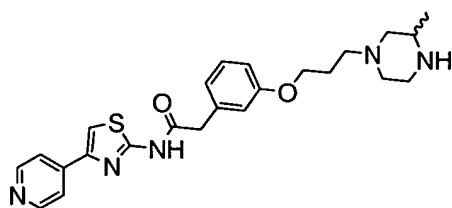
I-B-288



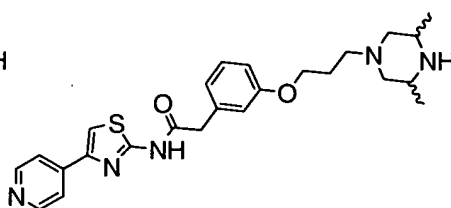
I-B-289



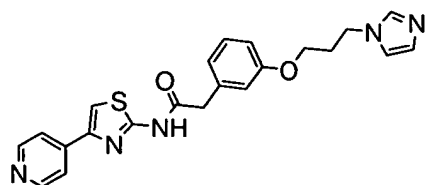
I-B-290



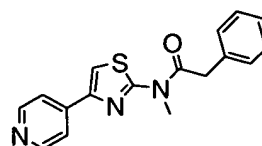
I-B-291



I-B-292

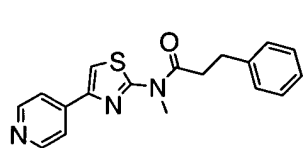


I-B-293

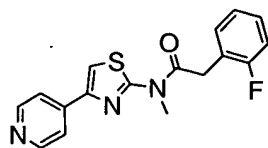


I-B-294

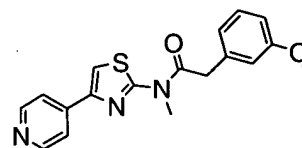
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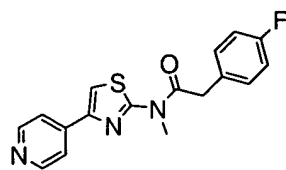
I-B-295



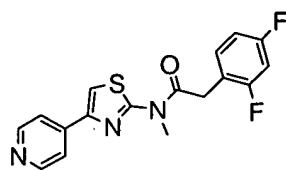
I-B-296



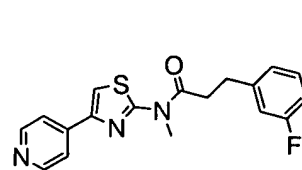
I-B-297



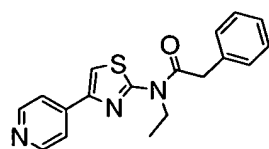
I-B-298



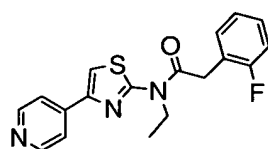
I-B-299



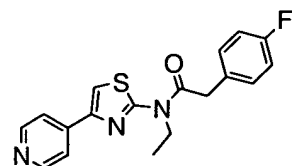
I-B-300



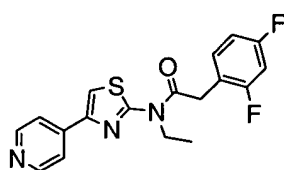
I-B-301



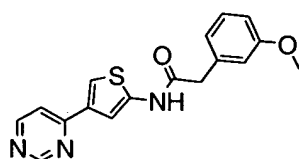
I-B-302



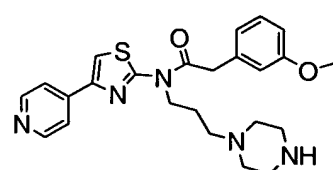
I-B-303



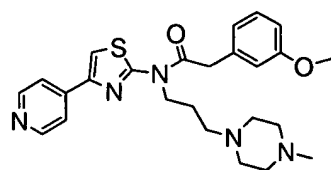
I-B-304



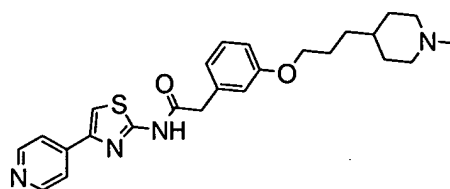
I-B-305



I-B-306

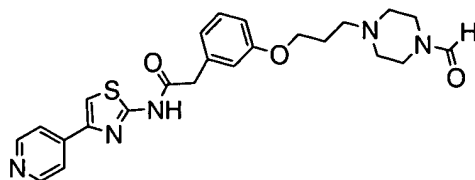


I-B-307

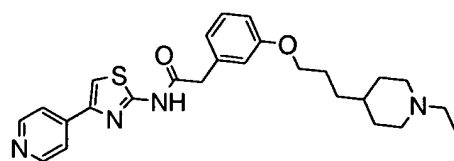


I-B-308

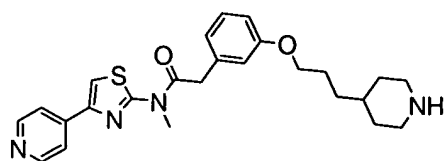
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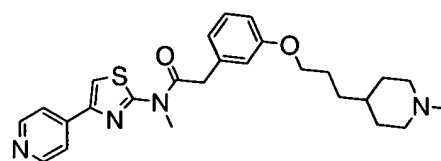
I-B-309



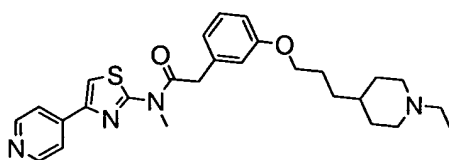
I-B-312



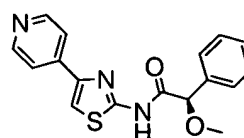
I-B-313



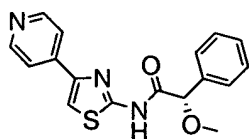
I-B-314



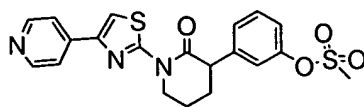
I-B-315



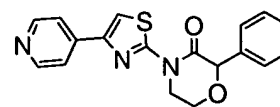
I-B-321



I-B-322

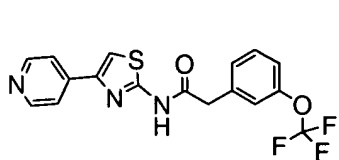


I-B-323

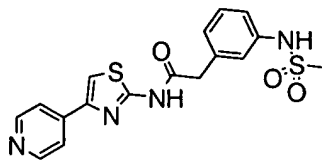


I-B-324

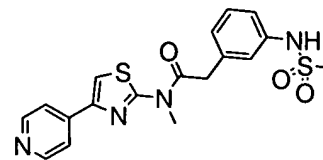
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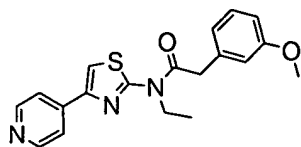
I-B-325



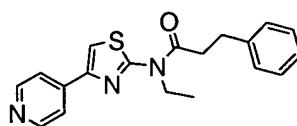
I-B-326



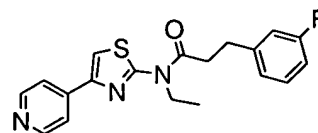
I-B-327



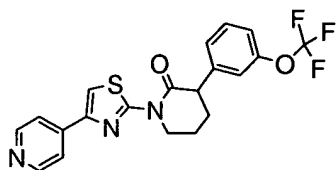
I-B-328



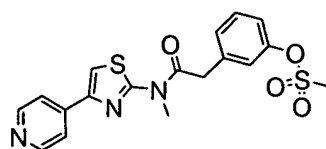
I-B-329



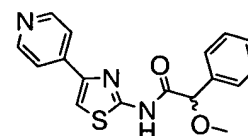
I-B-330



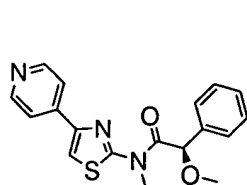
I-B-331



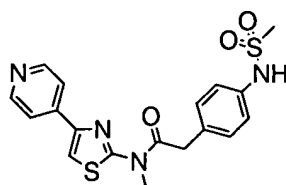
I-B-332



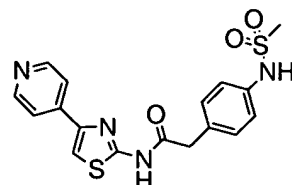
I-B-333



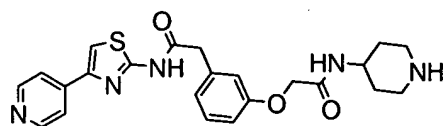
I-B-334



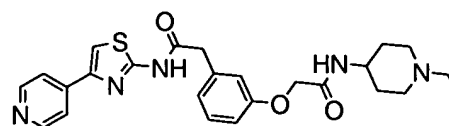
I-B-335



I-B-336

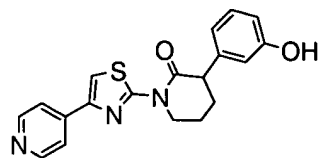


I-B-337

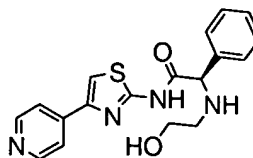


I-B-338

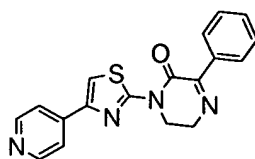
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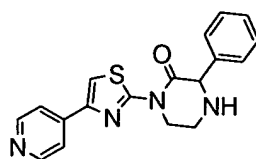
I-B-339



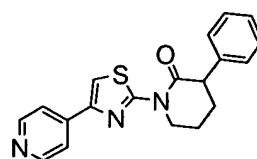
I-B-340



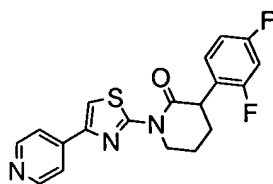
I-B-341



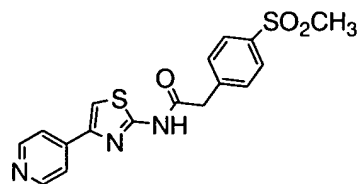
I-B-342



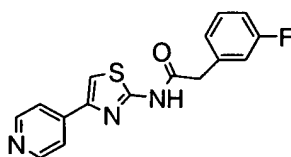
I-B-343



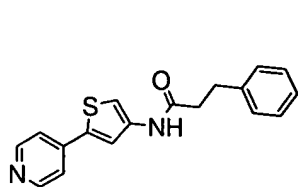
I-B-344



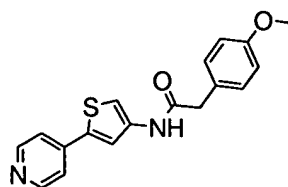
I-B-345



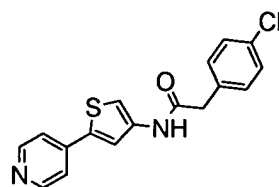
I-B-346



I-C-1

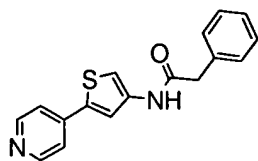


I-C-2

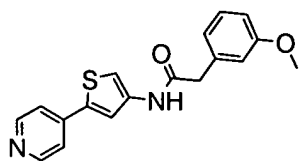


I-C-3

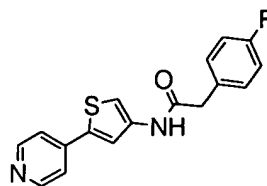
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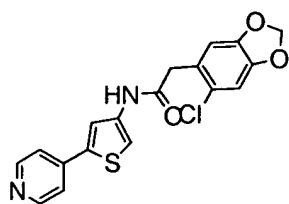
I-C-4



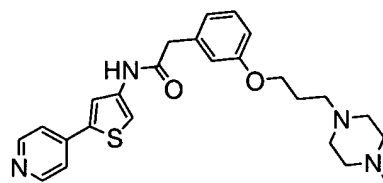
I-C-5



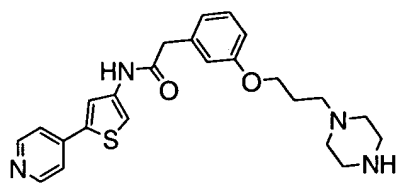
I-C-6



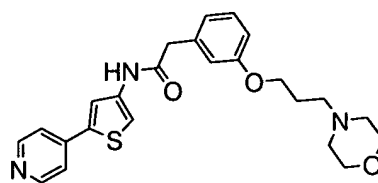
I-C-7



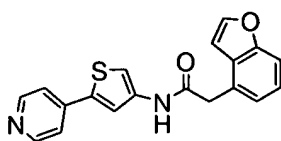
I-C-8



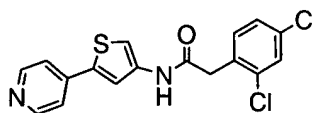
I-C-9



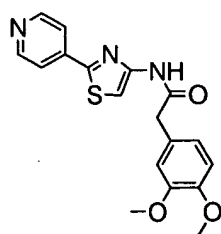
I-C-10



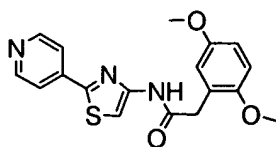
I-C-11



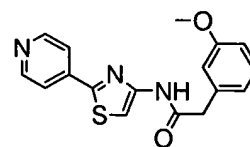
I-C-12



I-C-13

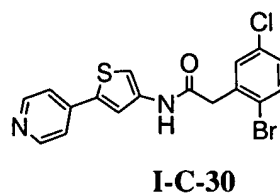
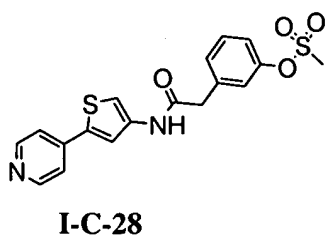
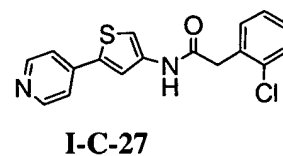
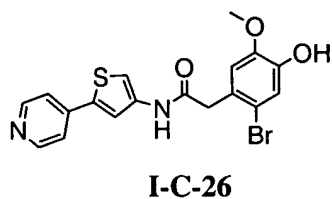
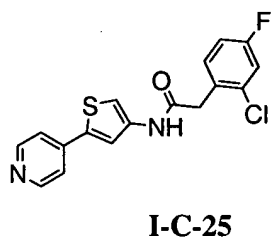
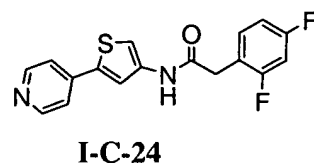
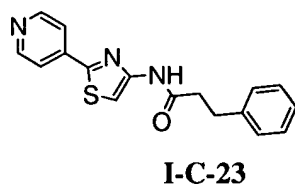
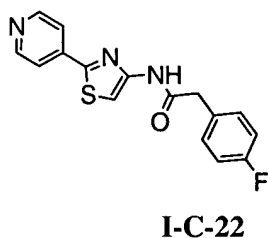
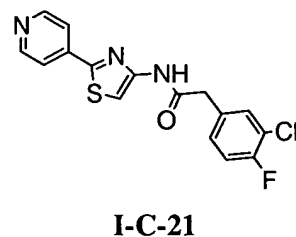
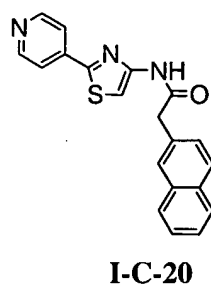
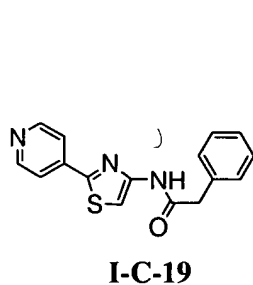
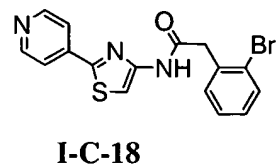
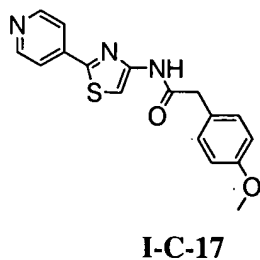
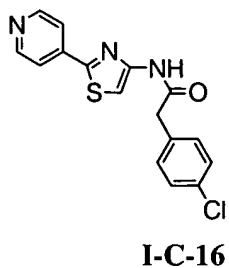


I-C-14

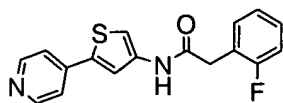


I-C-15

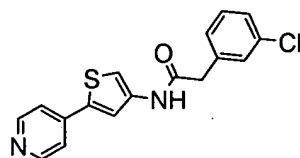
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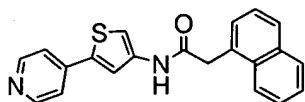
Applicants: Jingrong Cao et al.
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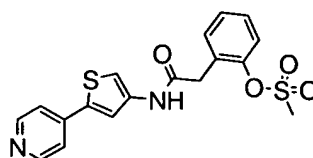
I-C-31



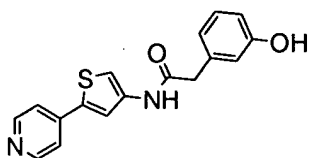
I-C-32



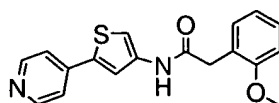
I-C-34



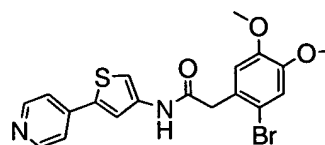
I-C-36



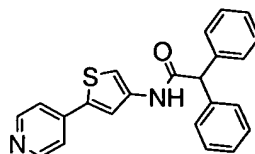
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46. (Original) A composition comprising an effective amount of compound of claim 1, and a pharmaceutically acceptable carrier, adjuvant, or vehicle.

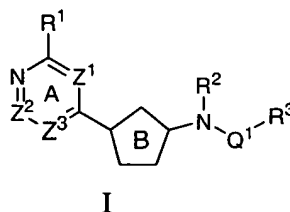
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47. (Original) The composition of claim 46, additionally comprising a therapeutic agent selected from a chemotherapeutic or anti-proliferative agent, an anti-inflammatory agent, an immunomodulatory or immunosuppressive agent, a neurotrophic factor, an agent for treating cardiovascular disease, an agent for treating destructive bone disorders, an agent for treating liver disease, an anti-viral agent, an agent for treating blood disorders, an agent for treating diabetes, or an agent for treating immunodeficiency disorders.

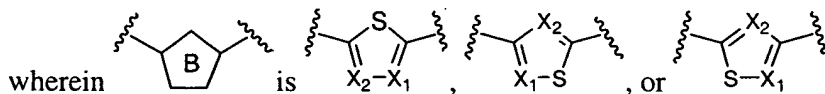
48. (Currently amended) A method of inhibiting ROCK, ERK, GSK, or AGC kinase activity in:

- (a) ~~a patient; or~~
(b) a biological sample;

~~which method comprises administering to said patient, or~~ said method comprising contacting said biological sample with a compound having the formula:



or a pharmaceutically acceptable salt thereof, wherein:



R^1 is halogen, CN, NO_2 , or V_mR ;

Z^1 and Z^3 are each independently CR^Z , and Z^2 is CR^1 ;

each occurrence of R^Z is independently halogen, CN, NO_2 , or $\text{U}_n\text{R}'$;

R^2 is $\text{U}_n\text{R}'$;

X^1 and X^2 are each independently CR^4 or N;

each occurrence of R^4 is independently halogen, CN, NO_2 , or V_mR ;

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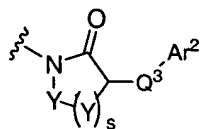
each occurrence of U or V is independently an optionally substituted C₁₋₆ alkylidene chain, wherein up to two methylene units of the chain are optionally and independently replaced by -NR-, -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR-, -NRCO-, -NRCO₂-, -SO₂NR-, -NRSO₂-, -CONRNR-, -NRCONR-, -OCONR-, -NRNR-, -NRSO₂NR-, -SO-, -SO₂-, -P(O)-, -P(O)₂-, or -P(OR)-;

m and n are each independently 0 or 1;

each occurrence of R is independently hydrogen or an optionally substituted C₁₋₆ aliphatic group; and each occurrence of R' is independently hydrogen or an optionally substituted C₁₋₆ aliphatic group, a 3-8-membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; or R and R', two occurrences of R, or two occurrences of R', are taken together with the atom(s) to which they are bound to form an optionally substituted 3-12 membered saturated, partially unsaturated, or fully unsaturated monocyclic or bicyclic ring having 0-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur; Q¹ is -CO-, -SO₂-, [[-CONR-,]] or -SO₂NR-;

R³ is Q²-Ar¹,

or R² and Q¹-R³, taken together with the nitrogen atom, form the cyclic group:



, where s is 1 or 2, each occurrence of Y is independently, as valency and stability permit, -CO-, -CS-, -SO₂-, -O-, -S-, -NR⁵-, or -C(R⁵)₂-, and R⁵ is U_nR';

Q² and Q³ are each independently a bond or a C₁₋₆ alkylidene chain, wherein up to two methylene units of the chain are each optionally and independently replaced by [[-NR'-,]] -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR'-, -NR'CO-, -NR'CO₂-, -SO₂NR'-, -NR'SO₂-, -CONR'NR'-, -NR'CONR'-, -OCONR'-,

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-NR'NR'-, -NR'SO₂NR'-, -SO-, -SO₂-, -P(O)-, -P(O)₂-, or -P(OR')-; and wherein any carbon atom in the one or more methylene units is optionally substituted with one or two occurrences of R⁶, wherein each occurrence of R⁶ is independently halogen, CN, NO₂, or U_nR', or two occurrences of R⁶, or R' and R⁶, taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered cycloalkyl, heterocyclyl, aryl or heteroaryl ring; and Ar¹ and Ar² are each independently a 5-8 membered saturated, partially unsaturated, or

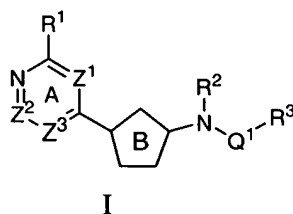
fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein Ar¹ and Ar² are each optionally substituted with 0-5 independent occurrences of TR⁷; wherein T is a bond or is a C₁-C₆ alkylidene chain wherein up to two methylene units of T are optionally and independently replaced by -NR-, -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR-, -NRCO-, -NRCO₂-, -SO₂NR-, -NRSO₂-, -CONRNR-, -NRCONR-, -OCONR-, -NRNR-, -NRSO₂NR-, -SO-, -SO₂-, -P(O)-, -P(O)₂-, or -P(OR)-; and each occurrence of R⁷ is independently R', halogen, NO₂, or CN;
or a pharmaceutically acceptable salt or composition thereof.

49. (Original) The method of claim 48, wherein the method comprises inhibiting ROCK activity.

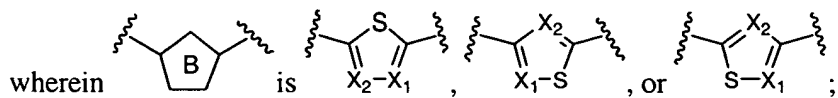
50. (Currently amended) A method of treating or lessening the severity of a ~~disease condition or disorder selected from~~ a proliferative disorder selected from breast cancer, ovarian cancer, cervical cancer, prostate cancer, testicular cancer, cancer of the genitourinary tract, esophageal cancer, cancer of the larynx, glioblastoma, neuroblastoma, stomach cancer, skin cancer, keratoacanthoma, lung cancer, epidermoid carcinoma, large cell carcinoma, small cell carcinoma, lung

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adenocarcinoma, bone cancer, colon cancer, adenoma, cancer of the pancreas,
adenocarcinoma, thyroid cancer, follicular carcinoma, undifferentiated carcinoma,
papillary carcinoma, seminoma, melanoma, sarcoma, bladder carcinoma, cancer of the
liver and biliary passages, kidney carcinoma, myeloid disorders, lymphoid disorders,
Hodgkin's, hairy cell carcinoma, cancer of the buccal cavity and pharynx, cancer of
the lip, tongue cancer, cancer of the pharynx, cancer of the small intestine, colorectal
cancer, cancer of the large intestine, rectal cancer, brain cancer, or leukemia; [[,]] a
~~cardiac disorder~~ cardiovascular disease selected from cardiomegaly, hypertension,
angina pectoris, cerebrovascular contraction, cerebral vasospasm, coronary
vasospasm, myocardial hypertrophy, ischemia/reperfusion-induced injury, endothelial
dysfunction, or erectile dysfunction; [[,]] a neurodegenerative disorder selected from
Alzheimer's disease, Huntington's disease, Parkinson's disease, basal ganglia
movement disorders, chorea, dystonia, Wilson's Disease, Pick's Disease, frontal lobe
degeneration, progressive supranuclear palsy (PSP), Creutzfeldt-Jakob Disease,
taupathology, or corticobasal degeneration; [[,]] an inflammatory disorder selected
from allergy or asthma; [[,]] an ~~immunologically mediated disorder~~ or diabetes, a viral
disease, or a bone disorder, comprising the step of administering to said patient a
compound having the formula:



or a pharmaceutically acceptable salt thereof, wherein:



R¹ is halogen, CN, NO₂, or V_mR;

Z¹ and Z³ are each independently CR^Z, and Z² is CR¹;

each occurrence of R^Z is independently halogen, CN, NO₂, or U_nR';

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R^2 is U_nR' ;

X^1 and X^2 are each independently CR^4 or N;

each occurrence of R^4 is independently halogen, CN, NO_2 , or V_mR ;

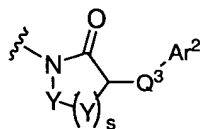
each occurrence of U or V is independently an optionally substituted C_{1-6} alkylidene chain, wherein up to two methylene units of the chain are optionally and independently replaced by $-NR-$, $-S-$, $-O-$, $-CS-$, $-CO_2-$, $-OCO-$, $-CO-$, $-COCO-$, $-CONR-$, $-NRCO-$, $-NRCO_2-$, $-SO_2NR-$, $-NRSO_2-$, $-CONRNR-$, $-NRCONR-$, $-OCONR-$, $-NRNR-$, $-NRSO_2NR-$, $-SO-$, $-SO_2-$, $-P(O)_2-$, $-P(O)_2-$, or $-P(OR)_2-$;

m and n are each independently 0 or 1;

each occurrence of R is independently hydrogen or an optionally substituted C_{1-6} aliphatic group; and each occurrence of R' is independently hydrogen or an optionally substituted C_{1-6} aliphatic group, a 3-8-membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; or R and R' , two occurrences of R, or two occurrences of R' , are taken together with the atom(s) to which they are bound to form an optionally substituted 3-12 membered saturated, partially unsaturated, or fully unsaturated monocyclic or bicyclic ring having 0-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur;
 Q^1 is $-CO-$, $-SO_2-$, $[-CONR-]$ or $-SO_2NR-$;

R^3 is Q^2-Ar^1 ,

or R^2 and Q^1-R^3 , taken together with the nitrogen atom, form the cyclic group:



, where s is 1 or 2, each occurrence of Y is independently, as valency and stability permit, $-CO-$, $-CS-$, $-SO_2-$, $-O-$, $-S-$, $-NR^5-$, or $-C(R^5)_2-$, and R^5 is U_nR' ;

Q^2 and Q^3 are each independently a bond or a C_{1-6} alkylidene chain, wherein up to two methylene units of the chain are each optionally and independently replaced

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by $[[(-NR')]$, -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR'-, -NR'CO-, -NR'CO₂-, -SO₂NR'-, -NR'SO₂-, -CONR'NR'-, -NR'CONR'-, -OCONR'-, -NR'NR'-, -NR'SO₂NR'-, -SO-, -SO₂-, -P(O)-, -P(O)₂-, or -P(OR')-; and wherein any carbon atom in the one or more methylene units is optionally substituted with one or two occurrences of R⁶, wherein each occurrence of R⁶ is independently halogen, CN, NO₂, or U_nR', or two occurrences of R⁶, or R' and R⁶, taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered cycloalkyl, heterocyclyl, aryl or heteroaryl ring; and Ar¹ and Ar² are each independently a 5-8 membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein Ar¹ and Ar² are each optionally substituted with 0-5 independent occurrences of TR⁷; wherein T is a bond or is a C₁-C₆ alkylidene chain wherein up to two methylene units of T are optionally and independently replaced by -NR-, -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR-, -NRCO-, -NRCO₂-, -SO₂NR-, -NRSO₂-, -CONRNR-, -NRCONR-, -OCONR-, -NRNR-, -NRSO₂NR-, -SO-, -SO₂-, -P(O)-, -P(O)₂-, or -P(OR)-; and each occurrence of R⁷ is independently R', halogen, NO₂, or CN; or a pharmaceutically acceptable salt or composition thereof.

51. (Original) The method of claim 50, comprising the additional step of administering to said patient an additional therapeutic agent selected from a chemotherapeutic or anti-proliferative agent, an anti-inflammatory agent, an immunomodulatory or immunosuppressive agent, a neurotrophic factor, an anti-psychotic agent, an agent for treating cardiovascular disease, an agent for treating destructive bone disorders, an agent for treating liver disease, an anti-viral agent, an

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agent for treating blood disorders, an agent for treating diabetes, or an agent for treating immunodeficiency disorders, wherein:

said additional therapeutic agent is appropriate for the disease being treated;

and

said additional therapeutic agent is administered together with said composition as a single dosage form or separately from said composition as part of a multiple dosage form.

52. (Currently Amended) The method of claim 50, wherein said compound is used to treat or lessen the severity of breast cancer, colon cancer, kidney carcinoma, lung cancer, melanoma, ovarian cancer, pancreatic cancer, or prostate cancer ~~disease, condition, or disorder is allergy, asthma, diabetes, Alzheimer's disease, Huntington's disease, Parkinson's disease, AIDS-associated dementia, amyotrophic lateral sclerosis (ALS, Lou Gehrig's disease), multiple sclerosis (MS), schizophrenia, cardiomyocyte hypertrophy, reperfusion/ischemia (e.g., stroke), baldness, cancer, hepatomegaly, cardiovascular disease including cardiomegaly, cystic fibrosis, viral disease, autoimmune diseases, atherosclerosis, restenosis, psoriasis, inflammation, hypertension, angina pectoris, cerebrovascular contraction, peripheral circulation disorder, premature birth, arteriosclerosis, vasospasm (cerebral vasospasm, coronary vasospasm), retinopathy, erectile dysfunction (ED), AIDS, osteoporosis, Crohn's Disease and colitis, neurite outgrowth, or Raynaud's Disease.~~

53. (Currently amended) The method of claim 50, wherein ~~disease, condition, or disorder is atherosclerosis, hypertension, erectile dysfunction (ED), reperfusion/ischemia (e.g., stroke), or vasospasm (cerebral vasospasm and coronary vasospasm)~~ said compound is used to treat or lessen the severity of cardiomegaly, hypertension, angina pectoris, cerebrovascular contraction, cerebral vasospasm, coronary vasospasm, myocardial hypertrophy, ischemia/reperfusion-induced injury, endothelial dysfunction, or erectile dysfunction.

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54. (New) The method of claim 50, wherein said compound is used to treat or lessen the severity of Alzheimer's disease.

55. (New) The method of claim 50, wherein said compound is used to treat or lessen the severity of an allergy or asthma.

56. (New) The method of claim 50, wherein said compound is used to treat or lessen the severity of diabetes.